



Keweenaw National Historical Park, Michigan



Draft
General
Management Plan
and
Environmental
Impact Statement

Cover Photos

Top:

Underground view of three miners cutting mass copper by hand, circa 1890. Photo courtesy of Quincy Mining Company, from the Michigan Technological University Archives and Copper Country Historical Collections.

Bottom:

NASA satellite photo of the Keweenaw Peninsula.



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DRAFT
GENERAL MANAGEMENT PLAN
ENVIRONMENTAL IMPACT STATEMENT

KEWEENAW NATIONAL HISTORICAL PARK
Houghton County, Michigan

United States Department of the Interior, National Park Service
in cooperation with
Keweenaw National Historical Park Advisory Commission

Four alternatives for future management and use of Keweenaw National Historical Park are presented and analyzed in this document. **Alternative 1**, a "no-action" alternative, presents a continuation of existing trends and management and projects these conditions into the foreseeable future, providing a basis to evaluate the other alternatives. This alternative leaves the National Park Service in primarily a caretaker mode of operation. Most resource protection, interpretive services, and information about the historic resources and the history of copper mining on the Keweenaw Peninsula would be provided by other organizations and groups. The most significant environmental impact of implementing alternative 1 would be the potential deterioration and loss of significant structures and landscapes. **Alternative 2**, the "community assistance alternative," would place the community at the forefront of implementing preservation actions and interpretive programs at sites in the park. The National Park Service would remain in the background and play a major support role, providing a comprehensive program of technical and financial assistance to the community to help make their actions a success. NPS support actions, undertaken in partnership with local governments, businesses, nonprofit groups, and other property owners, would range from assistance with preservation ordinances, resource preservation, and preservation grants in the park to assistance in establishing and enhancing educational and interpretive programs, not only in the park's two units but at cooperating sites as well. This alternative would have a positive impact on community relations, ensure the protection and interpretation of some historic resources, and improve the visitor experience. The resulting visitor experience might be less integrated compared to a more traditional national park system unit. Also, depending on NPS funding and what the community could accomplish, some historic resources could be lost through neglect over time. Under **alternative 3**, the "traditional park in the core industrial areas" alternative, the National Park Service would establish a very visible and traditional presence in the core industrial areas in each unit. The National Park Service would lease or acquire visitor use and administration services in one or more buildings in each unit. Other significant properties within the core industrial areas of the Calumet and Quincy units could be purchased and interpreted when funding and staffing levels were adequate. Higher visitation levels and longer visitor stays would be likely and would lead to increased visitor expenditures in the area, increased wear on resources, increased traffic, and spin-off commercial development. Depending on NPS funding and what the community was capable of accomplishing outside the core areas, some historic resources could be lost through neglect. **Alternative 4**, the National Park Service's preferred alternative, is actually a combination of alternative 2 and a refinement of the traditional park idea in alternative 3. Through selected acquisition and other preservation tools, the National Park Service would have a strong public presence in both park units. Through community assistance, the National Park Service would be a contributing member of a very organized and active partnership of local government and community groups. In the long term this alternative would best realize the vision of the park's establishing legislation and provide the broadest level of resource protection, interpretation, and visitor services, and the optimum opportunity for high-quality visitor experiences.

For questions or more information about this document, contact the superintendent, Keweenaw National Historical Park, 100 Red Jacket Road, Second Floor, Calumet, Michigan 49913, (906) 337-3168. The review period for this document ends October 30, 1997. All review comments must be received by that time and should also be addressed to the superintendent at the same address.



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Vision Statement



KEWEENAW
NATIONAL
HISTORICAL
PARK

Keweenaw National Historical Park is both a physical place and a concept that challenges our traditional notions of national parks. Some 30 years after the end of significant copper mining activity, a mission is being undertaken to represent the memories of the working days on the Keweenaw Peninsula through the preservation and interpretation of cultural landscapes, sites, structures, and artifacts.

The neighborhoods, towns, and rural areas of the Keweenaw Peninsula occupy a unique region that began providing copper for human use at least 5,000 years ago. These sites contain the physical evidence of our history: mine shafts and hoist houses, the remains of numerous other industrial structures; functioning schools, theaters, churches, and commercial buildings; and a wide range of housing types from mansions to company houses and log farm buildings. In and around these sites, Keweenaw National Historical Park will weave many

themes — industry, labor, immigration, social change, architecture, archeology, geology, and the natural environment — into the complex tapestry of the Keweenaw story.

Keweenaw National Historical Park is modeled after many successful efforts to preserve not only individually significant buildings, but also entire neighborhoods, towns, and regions that provide living contexts for these buildings. The park will promote a framework for cooperation among the National Park Service, state and local governments, citizens' groups, businesses, and individuals. This innovative organizational structure will be responsive to the needs and diversity of park partners and the community.

By preserving and interpreting the past, Keweenaw National Historical Park will enrich the community and visitors of today and endow future generations with a timeless treasure.

THE EXPERIENCE OF PLACE

It's called the experience of place. It can be a memory, a feeling, or a recognition of a sensation from the past. Perhaps it's the cool feel and distinctive smell of a mine entrance on a hot summer afternoon. Perhaps it's a stroll in the footsteps of historic residents along a village street. Perhaps it's the taste of ethnic food in a local restaurant.

Our senses are stimulated by sights of old mine company buildings, many now silent and empty, standing quietly, hauntingly, upon the landscape. The entrance of the former Quincy Mine might conjure up images of the miners at work and what it might have been like in the dark deep tunnels. In and around the Village of Calumet and its surrounding area, where the influence of a planned community is still very evident, senses can be stirred by a stroll through the mining district with its many church spires, rows of company-built houses, and old storefronts — much as they were when mining was at the forefront of life in Calumet.

By forest, lake and water-fall,
I see . . .
The lofty with the low. . . .
I hear the tread of pioneers
Of nations yet to be;
The first low wash of waves where
soon
Shall roll a human sea.

John Greenleaf Whittier – 1848

People from all over the world — Norway, Finland, Ireland, Wales, England, and Italy for example — left their homes to come to the Keweenaw in search of work. They created new communities and sought out their compatriots. Sometimes they banded together with people of other nationalities; sometimes they were divided by barriers of language, politics, or job and social status. The mining companies did their best to keep workers from joining unions — by using paternalistic services, the power of their

money, and sometimes cooperation with other mining companies. The companies wanted to extract maximum profits from the ores and workers of the Keweenaw. Mine workers, in turn, earned a living for themselves and their families from an industry that demanded harsh and unremitting work in the midst of continual danger. Judging from accident and death rates, “metal and coal-mining remained the most hazardous industries in the twentieth century United States.”

White — 1991, p. 281

William Eleory Curtis, a journalist, described the Calumet area in 1899 as

a curious settlement, which is neither a town nor a city nor a village, and is perhaps the richest community of its size in the world . . . a cluster of the finest mining buildings in the world [is] surrounded by two thousand homes [and] miles of macadam roadway. It is not incorporated. It has no organized form of government . . . but it is a perfect example of a town, complete, with all public institutions and conveniences.

Curtis – 1899

There was nothing magical, natural, or inevitable about the industrialization of the United States over the last 150 years. Natural resources such as timber, rich farmland, and minerals were abundant. New technologies created more and more possibilities for mass production of things made from those natural resources, and for selling those factory-made goods in faraway places. Markets were increasingly worldwide. More and more, people produced for distant consumers and were themselves dependent on goods and commodities that came from all over the globe. These things alone — raw materials, technologies, markets, railroads, and steamships — do not create an

industry. The Keweenaw copper mines show what does create an industry.

Nothing in the copper mines of Lake Superior is more remarkable and significant than the immense progress that has been made . . . within the last fifteen years. The rude skid shaft lining; the rickety ladder, the awkward kibble, the clumsy chains, the whim, the wheelbarrow . . . have all been superseded. . . . This progress has been made under very trying circumstances, at the cost of infinite toil, expense and discouragements. . . . If today our copper mines are prosperous, it is owing, under Providence, to their intrinsic worth, and the skill and indomitable energy of the people aided by non-resident capitalists.

Alfred P. Swineford – 1876

Stand on Quincy Hill looking down to the smelter on Portage Lake, past the great shaft-house that still stands over what was the deepest mine in the United States. Walk down Fifth or Sixth Street among Calumet's businesses and picture the bustle and bright lights of the copper boom a century ago. You are seeing a major chapter in this country's industrial history.

The recognition of America's copper mining story on the Keweenaw Peninsula is an attempt to protect the experience of place. The memories and senses attached to this very special place all capture parts of our nation's collective accomplishments. These places of memory have value for everyone if they are preserved and if the meaning connected with such places is explained. Keweenaw National Historical Park testifies to the skills, sweat, and determination of those who came here to make a living in this most unforgiving of industries.

SUMMARY

When Congress established Keweenaw National Historical Park in October 1992, it created the first national park system unit to commemorate the rich and complex story of copper mining on the Keweenaw Peninsula. The park is in the center of the Keweenaw, a small peninsula that extends about 100 miles into Lake Superior from Michigan's Upper Peninsula. The two park units, Quincy and Calumet, encompass historic industrial, commercial, and residential landscapes and structures situated along the extensive Copper Range.

Congress has directed the secretary of the interior to prepare a general management plan in consultation with the Keweenaw National Historical Park Advisory Commission. The purpose of a general management plan is to help guide park managers during the next 10–15 years in opening the park to the public, managing the park's resources, and telling the copper mining story. This draft management plan for Keweenaw National Historical Park presents four alternative approaches to managing the park. The process of developing these alternatives included the regular involvement of the commission through their quarterly meetings as well as several public meetings and workshops with the Keweenaw community. The alternatives presented here are purposely broad to allow flexibility since full implementation will take many years and resource conditions and opportunities may change over time.

Certain actions would need to occur no matter what alternative is selected. A first step is the establishment of a strong, structured partnership between the park and the private and public sectors of the community (see “A Partnership for the Park and Peninsula — The Foundation” chapter). The National Park Service would continue to assist the community in establishing local historic districts and preservation ordinances. Further, the National Park Service would pursue congressional action to modify the park's establishing legislation to activate the

commission's operating authorities and enable the National Park Service to acquire lands previously contaminated by hazardous substances but that no longer pose health or safety threats. Also, under all alternatives, the National Park Service would continue to provide, as staffing allows, technical assistance to the community in the areas of historic preservation and interpretation.

The no-action/continuation of existing management circumstances, alternative 1, proposes no changes in the current management direction. Visitors would still rely primarily on the services provided by groups like the Quincy Mine Hoist Association, Coppertown USA, and the Chamber of Commerce, and other sites to learn about the historic resources and the history of copper mining on the Keweenaw. The park would continue to work in partnership with the community to find ways to protect resources and provide visitor services. These efforts would continue to be limited by minimal NPS staffing and funding. Staffing levels would probably continue with two full-time employees and perhaps one or more part-time or seasonal employees, depending on available funds or staff from Isle Royale National Park. No property would be acquired by the National Park Service.

The most significant environmental impacts of implementing alternative 1 would be the potential deterioration and possible loss of significant structures and landscapes because of the park's limited capabilities to fulfill its legislated mission of providing for resource protection and visitor use. Without NPS interpretive media and staff, visitors would not be provided full opportunities to understand and appreciate the story of Keweenaw copper mining.

The community assistance alternative, alternative 2, would place the community at the forefront of implementing preservation actions and interpretive and educational programs at

sites throughout the park. The National Park Service's role would be to remain primarily in the background, in a support role of providing a comprehensive program of technical and financial assistance to the community to help make their actions a success. The primary areas of interaction between NPS staff and visitors would be at a destination visitor facility in the Quincy unit; basic visitor services would be provided in Calumet, and eventually some park interpreters would provide walking tours. Outside of the possible acquisition of the two or so buildings needed for visitor services and headquarters, the National Park Service would not have an acquisition program.

Under this alternative, the park would accomplish the legislative intent of establishing strong partnerships with and providing substantial assistance to the community. This would have a positive impact on community relations, ensure the protection and interpretation of some historic resources, and improve on the visitor experience. More visitors would likely come and stay longer, contributing more tourist dollars into the local economy. Increased visitation could also mean more impacts on resources, an increase in traffic and congestion, and spin-off commercial development that could impact resources and aesthetics. The very limited role of the National Park Service in acquisition, direct preservation, and interpretation activities would likely result in a much more limited and less integrated experience for visitors compared to a more traditional NPS unit. Also, depending on the timing of NPS funding and what the community was capable of accomplishing, some historic resources could be lost through neglect over time.

Alternative 3, the traditional park in the core industrial areas alternative, proposes what the name states — a much more traditional park experience in the core industrial areas of each park unit. As funding and staffing levels allowed, the National Park Service would invest substantially in each of the core industrial areas by acquiring significant properties, conducting resource preservation, and adaptively using the

structures. The National Park Service would install interpretive media and provide interpretive staff at key sites, establish partnerships, and provide technical and financial assistance to further core industrial area preservation. It would be primarily the community's efforts outside the park's core industrial areas that would determine the level of preservation and type of visitor experience offered there, although the park's interpretive services would likely overlap into these areas.

For visitors, the concentrated preservation and interpretation efforts in the core areas would help create a sense of entering a special place. This would contribute to visitor understanding and appreciation of the cultural significance of the sites. Higher visitation levels and longer visitor stays would be likely and would lead to increased visitor expenditures in the area, increased wear on resources, increased traffic and congestion, and spin-off commercial development. Depending on the timing of NPS funding and what the community was capable of accomplishing outside the core areas, some historic resources could be lost through neglect.

Alternative 4, the National Park Service's preferred alternative, is actually a combination of alternative 2's community assistance focus and a refinement of alternative 3's traditional park focus. Over time the National Park Service would establish a strong presence through ownership and interpretation of key resources in the park units. This would be complemented by a strong partnership with and assistance program for the community that would provide a higher quality visitor experience throughout the park than alternatives 1, 2, or 3.

The positive impacts of alternatives 2 and 3 would be combined under this alternative, resulting potentially in the broadest level of resource protection, interpretation, and visitor services, and the optimum opportunity for high-quality visitor experiences. This would complement the local government and private initiatives occurring outside the park and further improve the tourism potential of the area.

Visitors would have more dispersed, parkwide opportunities that offer less crowded, more enjoyable experiences. Employment resulting from park operations, construction and restoration activities, and spin-off tourism would positively benefit the local economy as would federal expenditures through grants and land acquisition.

Although these would be the optimum positive impacts, this alternative would be phased in gradually and could take many years to fully implement. During that time there is a high potential that some significant resources could be lost due to neglect. The increase in visitation would cause wear on historic resources, contribute more traffic and congestion, and diminish the quiet small-town atmosphere of the sites, particularly Calumet.

This *Draft General Management Plan / Environmental Impact Statement* will be available for formal public review for 60 days. During this review period, the planning team will hold public meetings and accept written and oral comments on the alternatives. Comments on the draft plan / environmental impact

statement will be summarized, and appropriate changes will be made to the document in response to those comments. Various elements of the preferred alternative and other alternatives might be modified for the *Final General Management Plan / Environmental Impact Statement* to address comments. A *Final General Management Plan / Environmental Impact Statement* will then be issued, which will become an approved plan 30 days after a record of decision is issued by the NPS regional director. The final approved plan will include agency and organization letters and responses to all substantive comments. After approval, the plan will be implemented over the next 10–15 years as funding and other contingencies allow.

Comments on or questions about this draft plan should be received no later than October 30, 1997, and should be submitted to

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HOW TO USE THIS DOCUMENT

This document is organized in four main parts. The first part, called “Purpose of and Need for the Plan,” sets the stage for the general management plan. The “Introduction” chapter provides background information about Keweenaw National Historical Park, including a brief description of the park and the advisory commission, the legislation that established the park, and a discussion of the cooperating sites. The “Planning Considerations and Process” chapter presents the foundations of the general management plan — the purpose and need for the plan; the park’s purposes and significance; issues and obstacles that need to be resolved; the assumptions that have been made in developing the plan; the park’s management objectives, interpretive goals, interpretive themes, and desired visitor experience; and an analysis of other related planning efforts.

The second main part, “Alternatives, Including the Proposed Action,” presents four alternatives for managing the park for the next 10 to 15 years. Alternative 1 describes a no-action/continuation of existing trends condition so that readers have a basis for comparing alternatives 2, 3, and 4, which provide three different concepts for park management. There is also a chapter that describes actions that would take place under all alternatives and a chapter that describes the future plans and studies that would be needed.

Another very important chapter in this second part describes the partnership concept, another foundation for the plan. The partnership describes a viable way — and perhaps the only way — to make Keweenaw National Historical Park a

dynamic and worthwhile part of the national park system, the community, and the peninsula without a major investment of federal dollars for capital expenditures or continuing long-term operations and maintenance costs. Regardless of which management alternative is chosen, the vision of the park will be fulfilled only as local partnerships mature and function and as federal and state support materialize.

The third major part, the “Affected Environment,” describes the park’s cultural and natural resources, some history about mining operations, and a description of visitor use at the park and in the region. This part also describes the socio-economic conditions that exist in the park and surrounding areas outside NPS boundaries. The information in the “Affected Environment” provides a context for analyzing the impacts of implementing the alternatives.

The fourth major part, the “Environmental Impacts,” describes in detail the effects that implementing each alternative would have on the resources described in the “Affected Environment.”

The public review of this document allows individuals, organizations, and agencies who are interested in and concerned about the future of this park to consider the benefits and drawbacks of these alternatives and an opportunity to comment. All comments and opinions will be considered before concluding the planning process. Comments are encouraged because they assist the National Park Service in making its final decision.

Purpose and Need for the Plan



Mass copper loaded on Mineral Range Railroad flatcar, circa 1895-1900.

Photo courtesy of Quincy Mining Company, from the Michigan Technological University Archives and Copper Country Historical Collections.



*Lithograph of Hancock and Houghton, 1913.
From Keweenaw National Historical Park collection.*



Calumet and Hecla Pattern Shop, now Coppertown USA Mining Museum.
Photo by Joseph Mihal and used by permission.

INTRODUCTION

BRIEF DESCRIPTION OF THE PARK

The Keweenaw Peninsula, only about 100 miles long and averaging 25 miles wide, juts into Lake Superior from the northwestern edge of Michigan's Upper Peninsula (see Vicinity map). The Copper Range, a highland that forms a spine along the length of the peninsula, is about 700 feet above the lake level. The Copper Range once held vast deposits of copper, and of course the mining companies who extracted the copper. Along this spine, near the center of the peninsula, is Keweenaw National Historical Park. Evidence of the copper industry on the Keweenaw is prominent at the park's two units — Quincy and Calumet — as well as at several other mining locations and communities (see Keweenaw National Historical Park and Cooperating Sites map).

The Quincy unit, with about 1,120 acres, is just northeast of the community of Hancock and adjacent to Portage Lake. This unit includes the remnant structures and mines of the Quincy Mining Company and its associated historic landscape. The Quincy Company operations stretched northeast to southwest along the hill above Portage Lake and the city of Hancock. There are seven Quincy mine shafts and surface works, and below the mines are several subdivisions of company housing. There are also remnant company administrative and service buildings and managers' residences. Two of the significant structures are the #2 shaft-rockhouse, which is built over a shaft that eventually reached 9,300 feet on the incline, and the #2 hoist house, which houses the world's largest hoisting engine. The Quincy smelter is also nearby, the only remaining smelter associated with Michigan copper mining. The integrity of this area is still very much intact; modifications have been minimal.

The Calumet unit, with about 750 acres, includes the historic mining community of Calumet, which is about 11 miles north of

Hancock, Michigan, and about 4 miles from Lake Superior. This unit includes the remnant administrative structures and mine buildings and associated historic landscape of the Calumet and Hecla Mining Company (hereafter referred to as the C & H Mining Company or the C & H) and the supporting commercial and residential areas of the Village of Calumet and Calumet Township. The Calumet lode, which provided half the dividend wealth of the entire district, was originally divided into the Calumet Mining Company on the north and the Hecla Mining Company on the south. The two companies merged in 1871 to become the C & H Mining Company. Many of the most significant structures on the Hecla side are in fair to excellent condition. Of the four remaining headframes built by the C & H Mining Company, Osceola #13 is within the park's Calumet unit. (The other three — Centennial #3, the contemporary Centennial #6, and the Kingston — are outside the park.)

The Calumet side also retains an impressive number of significant structures that are in good condition. Approaching Calumet from the main access (the Sixth Street Extension), important elements of the past are immediately visible, including the C & H administrative buildings, warehouse, pattern shop, machine shop, roundhouse, blacksmith shop, and bathhouse. Calumet (originally the village of Red Jacket) grew up on the northwest edge of the C & H mine location. Except for Agassiz Park, the Village of Calumet retains considerable integrity of setting. Company houses still bear the consecutive numbering of the C & H inventory. The everyday life of this working town is represented in commercial and domestic building types and in interiors as well as facades.

For a more detailed description and historical background, see the description of cultural resources in the "Affected Environment" and appendix A.

ESTABLISHMENT OF THE NATIONAL HISTORICAL PARK AND THE ADVISORY COMMISSION

The Park

The concept of a national historical park commemorating the significance of copper mining on the Keweenaw Peninsula surfaced in northern Michigan in 1974. In response to a congressional request, the National Park Service prepared national historic landmark nominations of historic districts at Calumet and the Quincy Mining Company properties in 1988. These nominations evaluated the districts' national significance and briefly reported on options for NPS involvement in the preservation of Keweenaw copper mining history.

Local support and another congressional request resulted in the National Park Service preparing another report for Congress — *Study of Alternatives, Proposed Keweenaw National Historical Park* (NPS 1991). This study focused on the Quincy Mining Company Historic District and the Calumet Historic District, which had both been designated as national historic landmarks in February and March 1989, respectively. Based on the findings of these studies, Congress passed Public Law 102-543, signed October 27, 1992, establishing Keweenaw National Historical Park (the park) in and around Calumet, Houghton, and Hancock, Michigan (see appendix B). The park's boundaries have not been finalized and are subject to modification pending further study and public involvement. Current planning is based on an interim boundary map prepared in 1992.

In January 1993 the first superintendent was assigned to the park, and a park office was established in Calumet. Since then the park has gained a full-time historical architect, a park historian who is on an term appointment, and a park planner who is on a seasonal appointment.

Administrative services for the park are provided by the staff at nearby Isle Royale National Park headquarters in Houghton.

The Commission and Its Operating Authorities

The 1992 legislation also established the Keweenaw National Historical Park Advisory Commission. The commission is charged with advising the secretary of the interior in the preparation and implementation of this *Draft General Management Plan* (see "A Partnership for the Park and Peninsula — The Foundation" chapter for more information on the commission's responsibilities).

Comprised of seven members who are appointed by the secretary of the interior, the commission meets quarterly to provide assistance and advice in the planning and development of park resources and programs. Five of the members, while appointed by the secretary, are nominated by the following entities identified in the legislation: the Calumet Village Council, the Calumet Township Board, the Quincy Township and Franklin Township Boards, the Houghton County Board of Commissioners, and the governor of Michigan. The remaining two are appointed based on their familiarity with historic preservation and national parks. Commission members serve without pay. In general their term is for three years. The following are the current commissioners and their affiliation:

Burton Boyum, Quincy Mine Hoist Association
Clarence Dwyer, Houghton County Commission
Dr. Kathryn Eckert, (former) State Historic

Preservation Officer

Dr. Larry Lankton, Michigan Technological University

Paul Lehto, Calumet Township Supervisor

Mary Tuisku, (former) Hancock Mayor
Vacant, Calumet

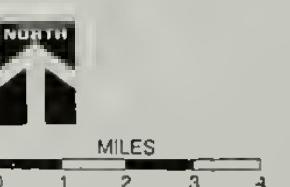
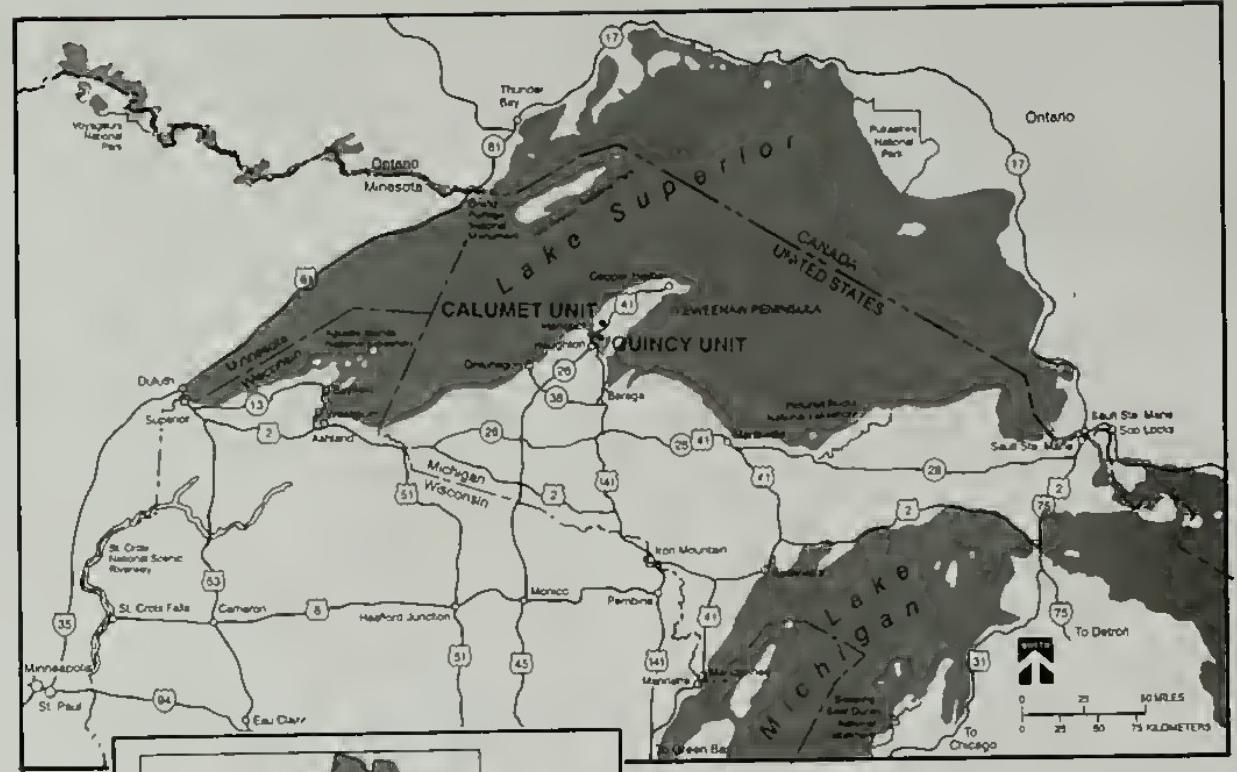
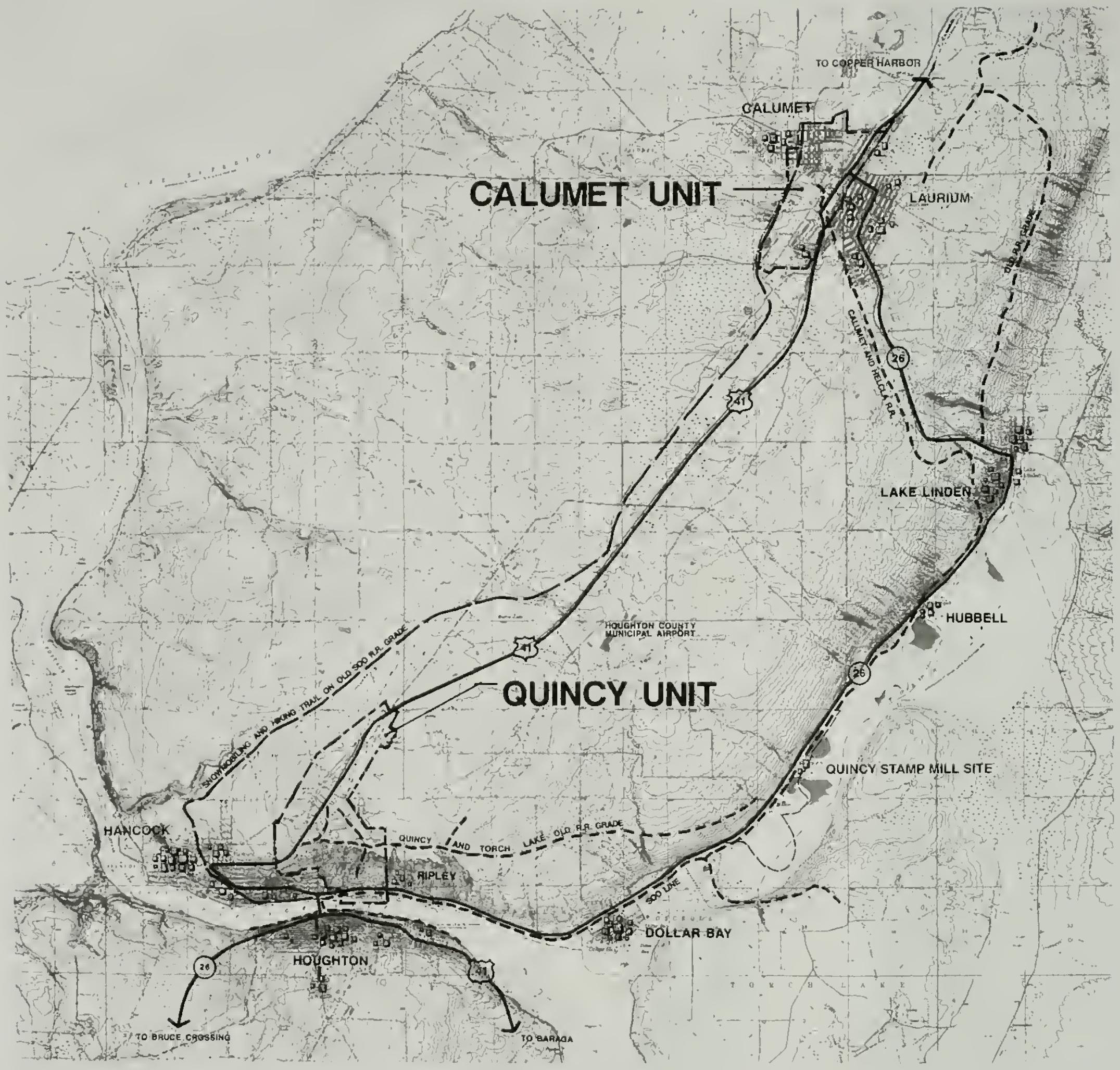


VICINITY KEEWEENAW



NATIONAL
HISTORICAL
PARK • MICHIGAN

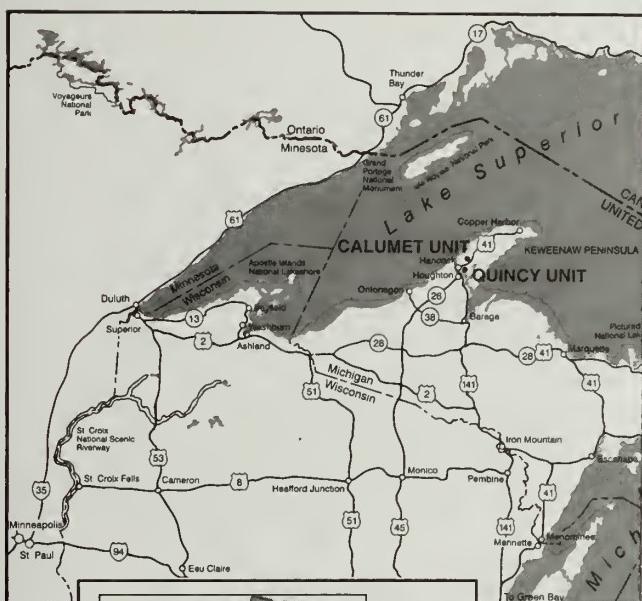
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VICINITY
KEEWEENAW



NATIONAL
HISTORICAL
PARK • MICHIGAN



FORT WILKINS
STATE PARK



COPPER HARBOR



KEWEENAW NATIONAL
HISTORICAL PARK UNIT



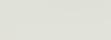
COOPERATING SITE



STATE FOREST



STATE PARK



NATIONAL FOREST

INDIAN RESERVATION



MILES

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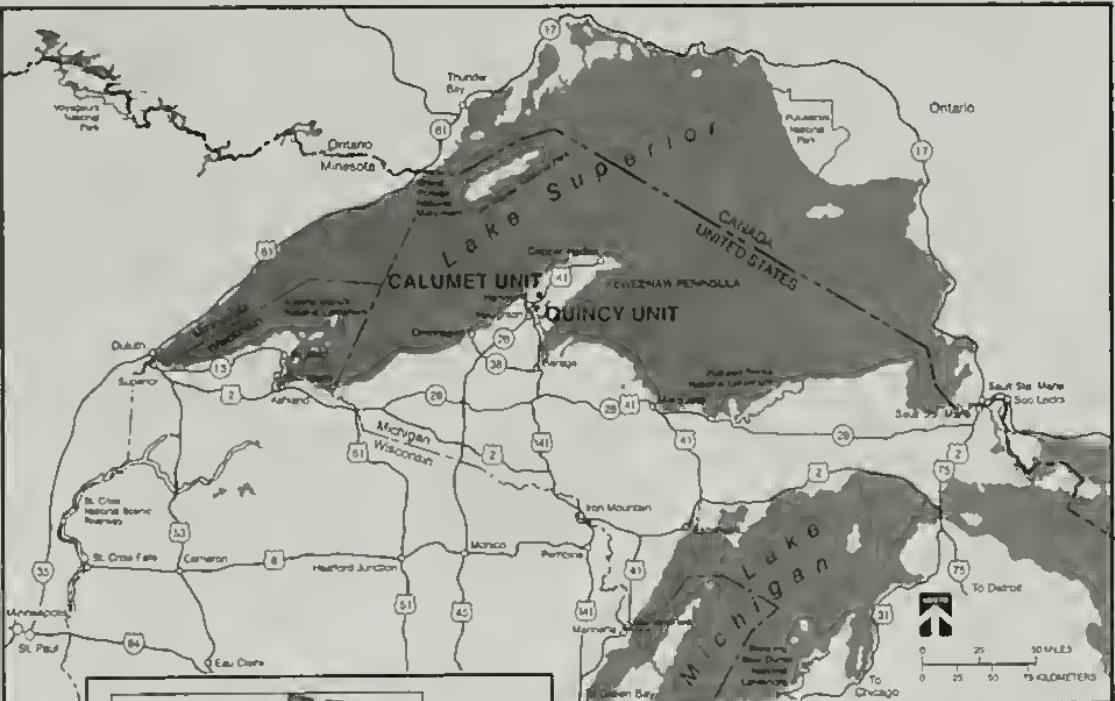
KEWEENAW
NATIONAL
HISTORICAL PARK
AND COOPERATING
SITES

KEWEENAW



NATIONAL
HISTORICAL
PARK • MICHIGAN

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CALUMET UNIT

- Calumet Theatre
- CopperTown USA Mining Museum
- Upper Peninsula Firefighters' Memorial Museum
- The Keweenaw Heritage Center at St. Anne's Church

QUINCY UNIT

- Quincy Mine Hoist and Underground Mine

KEEWEENAW COUNTY HISTORICAL MUSEUM

FORT WILKINS STATE PARK

LAURIUM MANOR TOURS

EAGLE HARBOR

COPPER HARBOR

DELAWARE COPPER MINE

MCLAIN STATE PARK

HOUGHTON CO.

KEEWEENAW CO.

GAY

LAURIUM

LAKE LINDEN

HUBBELL

HANCOCK

HOUGHTON

RIPLEY

SOUTH RANGE

PAINESDALE

COPPER RANGE HISTORICAL MUSEUM

HANKA HOMESTEAD

BARAGA

ONTONAGON

OLD VICTORIA

BERGLAND

ONT

GOGEBIC CO.

ONTONAGON CO.

HOUGHTON CO.

BARAGA CO.

IRON CO.

ONTONAGON CO.

GOGEBIC CO.



KEEWEENAW NATIONAL HISTORICAL PARK UNIT



COOPERATING SITE



STATE FOREST



STATE PARK



NATIONAL FOREST



INDIAN RESERVATION



MILES

0 5 10

KEEWEENAW NATIONAL HISTORICAL PARK AND COOPERATING SITES

KEEWEENAW



NATIONAL HISTORICAL PARK • MICHIGAN

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COOPERATING SITES

The cooperating sites associated with Keweenaw National Historical Park provide visitors to the Keweenaw area places to visit to learn about park stories, especially during the early years of the park's existence before any NPS facilities are developed. These sites are public or commercial facilities. The park superintendent has established informal (verbal) agreements with these sites using two basic standards for selection.

- The site has a direct relationship to at least one aspect of the copper mining story of the Keweenaw Peninsula.
- The site is open to the public on a regular basis.

Even when NPS facilities become available to visitors, cooperating sites will still provide important depth to the visitor experience and will further demonstrate the important role of using partnerships to tell the park stories to visitors from throughout the nation. These cooperating sites are as follows; see appendix C

for details about the sites. Site locations are shown on the previous Keweenaw National Historical Park and Cooperating Sites map.

A. E. Seaman Mineralogical Museum
Copper Range Historical Museum
Delaware Copper Mine
F. J. McLain State Park
Fort Wilkins State Park
Hanka Homestead
Historic Calumet (all in Calumet unit)
Calumet Theatre
Coppertown USA Mining Museum
The Keweenaw Heritage Center at St. Anne's Church
Upper Peninsula Firefighters' Memorial Museum
Houghton County Historical Museum
Keweenaw County Historical Museum
Laurium Manor tour
Old Victoria
Porcupine Mountains Wilderness State Park
Quincy Mine Hoist and Underground Mine (in Quincy unit)

PLANNING CONSIDERATIONS AND PROCESS

Several steps are required to develop a foundation for a general management plan. After defining the purpose and need for the plan, the most important step is identifying the purpose and significance of the park. With those in place, the next steps are: identifying the issues/obstacles to preserving, protecting, and interpreting the park resources; identifying the assumptions being made; and developing the management objectives, interpretive goals, interpretive themes, and the desired visitor experience for the park. With an analysis of other plans or studies being done that might have an affect on or have relevance to the general management planning effort, the foundation for the plan is firmly in place. The following sections describe the foundation for Keweenaw National Historical Park.

PURPOSE AND NEED FOR THE PLAN

The National Park Service is required to prepare general management plans to guide administration and development of national park system units. These plans provide guidance for NPS managers, generally for 10 to 15 years, on how to protect a park system unit's natural and cultural resources while providing opportunities for visitors to understand, enjoy, and appreciate the reasons for which the park unit was established.

The purposes of this *Draft General Management Plan* are to

- provide a broad framework to accomplish legislative objectives
- involve appropriate constituencies for advice on major decisions
- recommend ways to protect significant resources
- relate development to preservation and interpretation needs
- identify park audiences and determine how to best communicate major messages

- prepare the groundwork for drafting cooperative agreements with appropriate agencies and organizations to ensure preservation and interpretation of the park and its stories

This *Draft General Management Plan* represents the efforts of the National Park Service and the Keweenaw National Historical Park Advisory Commission, in consultation with representatives of the state of Michigan; Keweenaw and Houghton Counties; the cities of Houghton and Hancock; the Village of Calumet; Calumet, Quincy, and Franklin Townships and their residents; the park's cooperating sites (explained earlier); and the people from all over the country who sent in response forms and who participated in public meetings and workshops.

PURPOSES OF THE NATIONAL HISTORICAL PARK

The purposes of Keweenaw National Historical Park, as stated in Public Law 102-543, and as developed in public workshops are as follows:

Tell the story of the role of copper in the development of an American industrial society and the effects on the Keweenaw Peninsula of providing that copper.

Identify, study, and preserve the nationally significant historical and cultural sites, structures, districts, landscapes, and other resources of the Keweenaw Peninsula for the education, benefit, and inspiration of present and future generations.

Interpret the historic synergism between the geological, aboriginal, sociological, cultural, technological, economic, and corporate influences that relate the stories of copper on the Keweenaw Peninsula.

Develop and sustain into the 21st century the park and the community through a blend of private, local, state, and federal management, investment, and ownership.

SIGNIFICANCE OF THE PARK

The significance of Keweenaw National Historical Park is the story of copper and its relation to the development of an industrialized society in the United States.

The story of copper is significant because of the following:

Copper was ideal for electrical and military applications, and it enabled the widespread distribution and use of electricity, which fostered a major industrial and societal revolution in the United States.

The Keweenaw Peninsula is significant to the story of copper because of the following:

The peninsula was a unique geologic occurrence in the world — it (and nearby Isle Royale) was the only area in the world where economically abundant quantities of pure, elemental copper occurred. The copper was found in three major geologic settings: fissures, amygdaloids, and conglomerates. The commercial abundance of copper on the Keweenaw Peninsula ensured developers of electrically based applications that large, inexpensive quantities of copper would be available for their use, thus helping to launch a fundamental change in American society.

The peninsula contains the remnants of the oldest known metal mining activity in the western hemisphere, dating from about 7,000 years ago.

The peninsula contains copper that could be profitably mined and refined by techniques available in the 19th century. As a result, it was the largest copper-producing region in

the United States from 1845–87 and an important source of copper to the world during this period. Its production expanded even after 1887, reaching a peak in 1918.

The peninsula is the location of the nation's first mining rush, preceding the California gold rush by six years, and this copper rush produced more wealth for U.S. industrialization than did the gold rush.

The resources in the Calumet and Quincy units are significant to the development of an industrial society because of the following:

These sites represent the greatest longevity, productivity, and technical innovation of mining copper on the American continent and portray elements of the industry — mining and milling technology, immigration and ethnic settlement, paternalism and company towns, and labor organizations — that continued from prehistoric times until 1968.

These sites attracted immigrants from many countries; their arrival, employment, and productivity provided a foundation for the modernization of an industrial society.

Major events in a 1913–14 strike took place at these sites; this strike elicited national attention and crippled the famed Western Federation of Miners.

CURRENT ISSUES

The following issues were identified during the planning process and represent some of the primary obstacles to preserving and protecting the resources and providing for visitor use and interpretation of the story. Additional issues may be identified in the future.

The Commission's Operating Authorities

At the time President Bush signed the legislation that established Keweenaw National

Historical Park, he specifically withheld activation of the commission's legislatively granted operating authorities because of incongruities in the legislative language related to how the commission members are appointed. Rectifying this incongruity will require congressional action.

Resource Management

The park contains many historic resources that are important to the historic scene and to the story of copper. Many will be lost if they do not receive protection soon. There are more resources than can be feasibly protected in the near future given limited financial resources in the public and private sector. There is no mechanism to determine which ones are most significant and how they should be protected and used.

Park Integrity and Community Growth

Maintaining the integrity and character of the park's historic landscapes is critical to visitors understanding the stories and significance of the park. Although some protection is afforded the park units by their status as national landmarks and listing on the National Register of Historic Places, there are few regulatory mechanisms in place to ensure compatible development in and around the park.

Because most of the properties included within the park's boundaries will remain in private ownership, the major responsibility for maintaining and enhancing the historic character of the park's resources will fall to private citizens. This will be an increasingly complex challenge because the park's existence creates an attractive environment for investment and development. New commercial development in Calumet Township has already threatened the historic character and integrity of the Calumet unit and recent development proposals near Quincy also raise concerns.

Policies and plans to protect the park's resources must recognize the dynamic nature of communities in and around the park as places experiencing accelerating change.

Community Impacts

Calumet was designed primarily as a pedestrian community that was also served by mass transit. Calumet is just beginning to be challenged by the physical demands of increasing tourism traffic. As the park grows and visitation increases, Calumet faces a major challenge of accommodating visitors, residents, and business customers and their automobiles while preserving the historic character of the area. Also, park growth could be a factor in potential increases in property values and resultant property tax increases.

Park Staffing

The current staffing level will not accommodate the expected increase in visitor use or handle the variety of activities necessary to make the park operational.

Partnership Coordination

The creation of this park culminated the efforts of an enthusiastic group of community leaders. Now the National Park Service, the state of Michigan, and the Keweenaw community are challenged to work together to make the park a success. The community leaders and the different interests they represent are eager to define their new roles as partners and find ways to contribute substantively to the park's development.

Many of the groups have developed their own plans for ownership and development of historic resources within the park. Many are in the process of implementing these plans and are pursuing their own separate fund-raising activities.

The National Park Service also is eager to define its role as a partner. Within its limited staffing and funding, the park strives to promote, protect, and develop the park using a variety of strategies currently available, but these efforts often do not meet the expectations of the partners.

Cooperative Agreements

The relationships between cooperating sites and the park are currently informal and based on verbal agreements and the posting of cooperating site signs. This does not provide for a clear understanding and agreement between the parties of their roles and responsibilities and liabilities associated with the relationship.

Visitor Experience

Although some of the cooperating sites are open to visitors on a year-round basis, there are no year-round park orientation and interpretation services. Much must be done yet to ready the park for visitors, and many decisions need to be made about where visitors would be directed to begin their visit and how best to tell the park stories.

Boundary Concerns

The legislation that established the park directed the secretary of the interior to establish the boundaries for the units of the park, concentrating on the Quincy and Calumet National Historic Landmark Districts. The current boundaries of the Calumet and Quincy units, however, are interim boundaries. Subsequent to the establishment of those interim boundaries, other areas have been identified that should be considered for possible addition to the park to ensure that all the significant resources related to the copper story on the Keweenaw are protected and interpreted.

NPS Acquisition or Management of Contaminated Property

Past activities associated with the mining and processing of copper ore resulted in the use or generation of various hazardous materials. It is unclear what contamination may exist at the various sites within the park and whether those likely to have some contamination pose any threats to human health and safety or to the environment. The answers to these questions may affect the park's ability to acquire or manage certain properties in the future. The park's enabling legislation clearly states in section 4(d) that

[t]he Secretary shall not acquire any lands pursuant to this Act if the Secretary determines that such lands, or any portion thereof, have become contaminated with hazardous substances (as defined in the Comprehensive Environmental Response, Compensation, and Liability Act . . .).

This language is very restrictive, because it prohibits the National Park Service from acquiring any contaminated properties, even if they do not pose a threat to human health or to the environment. The Department of Interior policy that usually guides NPS actions regarding the acquisition of contaminated property is less restrictive. While this policy generally prohibits the acquisition of contaminated properties, it allows the departmental agency to weigh the benefits of acquisition against relevant costs, including fair market value of the property, remediation costs, and potential damages. One issue is whether it is in the best interest of the public to retain the more restrictive language in the park's establishing legislation. If retained, it could substantially limit what properties the NPS could manage, receive through donation, or purchase.

Of further issue is what liability may the National Park Service incur through acquisition or significant management control of sites under such authorities as the Comprehensive Environ-

mental Response, Compensation, and Liability Act (CERCLA, 42 USC) 9601 et. seq.¹ and the Resource Conservation and Recovery Act.

PLANNING ASSUMPTIONS

These assumptions are a guide for understanding what may be feasible at the park and are another part of the basis of the plan. The following assumptions have been made for this *Draft General Management Plan* for Keweenaw National Historical Park.

1. NPS involvement in the preservation, interpretation, and management of resources within the core industrial area in the Quincy and Calumet units is critical to comprehensive visitor understanding and appreciation of the park.
2. The park will have limited federal funding.
3. The National Park Service cannot fulfill the vision by itself. The vision of the park will only be fulfilled through the establishment of sound partnerships among the National Park Service and local governments, other public and private entities, and the residents of the area.
4. Partners are expected to continue developing their funding base, but they cannot be expected to be the primary financial source.
5. Tourism to the Keweenaw Peninsula will continue to grow.
6. The National Park Service will not be a major landholder on the Keweenaw Peninsula.
7. The park will be one of many major attractions on the peninsula.

1. For a comprehensive overview of this act, see the NPS 1994 *CERCLA Guidance Manual*.

8. The commission's operating authorities will be activated in the near future.
9. Limited preservation and interpretation of the copper story will continue throughout the Keweenaw Peninsula without the National Park Service.
10. The park encompasses resources that will continue to be dynamic communities in which residents will continue to live, earn their livings, and raise their families

MANAGEMENT OBJECTIVES

Management objectives, done for each NPS unit, provide a framework for conserving park resources, integrating the park into its surrounding environment, and accommodating public use in accordance with NPS management policies. The following are the management objectives for Keweenaw National Historical Park.

Interpretation

Visitors will understand the copper mining story and its impact on the industrial advancement of the nation and world as well as on the environment and the people who were a part of that story.

Resource Preservation

The National Park Service will strive to work with the community to identify and protect the significant natural and cultural resources of the park within available means.

Education

Information related to the park's resources will be presented to the public and educational community as a learning laboratory that fosters a

greater understanding and appreciation of cultural heritage.

Visitor Safety

Keweenaw National Historical Park will be designed and operated to ensure a safe environment.

Partnerships

The National Park Service will maintain strong partnerships with the local community, the local governments, and the state, as well as with other agencies and private organizations, to provide for historic preservation, associated resource protection, interpretation, and visitor services.

Research

The park will have an active research program using a variety of public, private, and academic partners.

INTERPRETIVE GOALS

Interpretive goals, achieved through planning, design, development, and operation, help to fulfill the vision for the park. Based on the purpose and significance statements, these goals provide guidelines for making decisions concerning desirable visitor experience opportunities.

Opportunities will be provided for visitors and area residents to

understand Keweenaw's natural, cultural, and industrial history and be able to relate it to the broader scope of American experience

explore the diversity of Keweenaw's cultural resources and be inspired to participate in perpetuating the area's heritage

obtain information necessary to safely, enjoyably, and easily visit Keweenaw's cultural and natural features, and visitor facilities, activities, and services

acknowledge Keweenaw National Historical Park as an important national park area that preserves and interprets nationally significant resources

understand the economic, environmental, and social effects of the Keweenaw copper industry, and wisely use, develop, and preserve natural resources in the future

understand C & H's magnitude, complexity, and creativity, and appreciate the corporation's contributions to the community, the copper industry, and the nation

understand Quincy Mining Company's role as a typical example of the rural industrial setting of many copper country mines

experience current and historic lifestyles of the region to understand similarities and differences between contemporary and historic people

participate in a diversity of activities appropriate for audiences with differing levels of interest, understanding, and sophistication

receive current, accurate, and balanced information that presents all viewpoints and beliefs regarding the area's people, technology, and resources

understand that Keweenaw's cultural landscape is the product of prehistoric, historic, and continuing changes in natural and cultural environments

participate in a integrated interpretive program developed cooperatively by the National Park Service and other visitor service providers to offer a complete, balanced Keweenaw visitor experience,

PURPOSE AND NEED FOR THE PLAN

including aboveground and belowground experiences

PRIMARY INTERPRETIVE THEMES

Primary interpretive themes describe those ideas about a site that are so important we want all visitors to that site to understand them. Based on the area's purpose and significance statements, themes provide guidelines for making decisions concerning which interpretive stories will be told to visitors and what interpretive facilities will be required to tell those stories. The following themes and stories related to Keweenaw's copper country were developed during many community workshops held on the Keweenaw Peninsula and through several public review opportunities. An elaboration of the following primary themes can be found in appendix D.

People's Lives

The rich copper resources of the Keweenaw Peninsula have had a long and profound effect on the lives of area residents.

Copper country miners and their families often led hard and difficult lives.

Immigrant families who began their American experience on the Keweenaw influenced life on the peninsula with their own rich cultural diversities.

Labor Management Relations

The history of labor-management relations on the Keweenaw reflect broad national patterns.

Corporate Paternalism

Corporate paternalism greatly influenced all aspects of public/social life.

Mining Technology

The difficulty of mining, milling, smelting, and delivering copper to market from Michigan's Upper Peninsula required the evolution of technology and economies of scale to keep Keweenaw's copper-related industries competitive and profitable.

Natural Resources

Natural resources of Michigan's Upper Peninsula influenced Keweenaw's cultural landscape to create a special sense of place.

DESIRED VISITOR EXPERIENCE

Visitor experience may be described as those memories, often few and characterized by feelings rather than knowledge, that people come away with after their contact with a place. Some visitors' best experiences occur informally. The cool feel and distinctive smell of a mine entrance on a hot summer afternoon, a stroll in the footsteps of historic residents along a village street, or the taste of ethnic food in a local restaurant may become a visitor's most memorable experience. The following section describes the visitor experience for the park that should be met by the approved plan. (See appendix E for information about other interpretive planning efforts.)

The national park experience should begin before visitors arrive at the park. As they approach Houghton, their curiosity should be spurred by glimpses of the waterways, the bluffs, and the restored shafthouse of Quincy Mining Company overlooking Portage Lake. Publications distributed at regional information centers or a traveler's information station should build anticipation for upcoming opportunities.

Orientation

Visitors should find orientation and overview interpretation of the copper story near the Portage Lake crossing near Houghton or at the Quincy unit. Orientation and overview areas should be easy to find, accessible to recreational vehicles and buses, and provide ample parking. Orientation should offer accurate information and direction to sites and visitor contact facilities, historic areas, tour route options, and recreational opportunities throughout the region, especially those that tell specific chapters of the copper story. Visitors should be able to easily follow directions to attractions using several transportation methods. Overview interpretation should briefly introduce themes related to the region's copper story with equal emphasis on mining technology and social aspects. All information should provide visitors a regional perspective and a feeling that the area's orientation and interpretation programs related to copper are fully integrated among the National Park Service and partners in the community.

Within the national park units full visitor services would be offered year-round, including a wide selection of interpretive materials and activities suitable for various audiences.

Quincy

Several restored buildings and remnants of other structures, some landscapes, and a variety of interpretive media should convey understanding of the vast mining operations on the Keweenaw Peninsula in general and the magnitude of the Quincy Mine in particular.

Underground operations should be brought to life safely and effectively so visitors understand mining activities at a typical Keweenaw copper mine. Visitors should find opportunities to appreciate the conditions under which miners worked — constant danger, temperature extremes (from cold and wet in upper levels to hot in lower levels), and an unhealthy environment. Most visitors would probably consider these

conditions scary, unfriendly, dark, and claustrophobic. Visitors could compare their own feeling about the miners' work environment with the feelings expressed by miners who daily worked 9,000 feet under ground. Visitors should understand how class, ethnic, or skill differences determined who worked below the surface and who stayed above. Visitor appreciation of the enormous scale of operations should be enhanced when they find themselves dwarfed by exhibited mine equipment, see a map of the mine's extreme depth and expanse, and look at historic photos that reveal the tremendous number of people required to keep the mine active.

Activities at Quincy should provide opportunities for visitors to understand that the Keweenaw Peninsula is the oldest area of metal mining in the western hemisphere, and that for many years mining technology evolutions at Quincy and surrounding mines drove the region's economy. Visitors should see exhibits and publications and hear audio tapes to understand how geology dictated the development of mining technologies. Broad views from the bluffs around the Quincy mine should provide visitors with a memorable view of the Keweenaw Peninsula.

Calumet

As visitors travel from Quincy to Calumet, they drive through a landscape that changes from rural mining to residential. After visiting Calumet's industrial core and downtown districts, visitors should appreciate the magnitude of the C & H Mining Corporation and its influence upon development of a planned community. Visitors should find opportunities to understand the village, the C & H industrial complex, the surrounding landscapes, and the lifestyles of past and current residents. Visitors should have the opportunity to see the cultural heritages of the varied ethnic groups that populated the Keweenaw reflected in historic structures and landscapes. In some areas visitors might feel they have stepped back in time as

they explore the C & H industrial district or walk Calumet's streets to see architecture that ranges from a typical miner's house to a Gothic revival church; in other areas they could see more modern construction that reflects the continuing cultural and economic evolution of the area.

Visitors might compare the historic activity with the modern activity they see. As today, everything then was nearby and activity was constant as people walked to churches, mine shafts, markets, and schools. Today's visitors and residents might find less noise, dust, and commotion, but they should discover ethnic and cultural diversity and many attractions within easy walking distance.

Visitors who spend time in the industrial core area of the park should feel that they are in the center of activity of a corporate giant — a place of business, industry, and machinery. The size of the structures and the expanse of the industrial district show the magnitude, complexity, and creativity that spanned 100 years of C & H mining history. The exterior of all remnant mine buildings and administrative structures associated with the C & H Mining Company would continue to be seen from the street, and there should be some opportunities to see interiors. Some historic structures should be used as interpretive facilities; many might be adapted for other uses. Visitor experience should be enhanced by simulating the noise, smells, and the hustle and bustle of activity that would have been present in certain places during the historic period depicted.

In Calumet's downtown historic district, visitors should have the opportunity to experience a company town — but not a company town that reflects oppressive systems such as those that could be found in Europe and many other company towns in the United States. Calumet's roads, utilities, stonework structures, schools, and amenities should reflect a company-encouraged stability and a sense of community. Today's visitor should find evidence of Calumet's history and culture, which included

theaters, bars, churches, cemeteries, a library, social clubs, transportation systems, and parks. And they should learn and see how Calumet's corporate and social heritage has lived on long after the decline of the copper industry.

Cooperating Sites

Along with the national park, many other sites and activities on the Keweenaw Peninsula offer visitor experiences related to the industrial and social stories of the copper country, including several communities and the people who make Keweenaw a special place.

Visitors should find high-quality exhibits, publications, and tours at cooperating historical and cultural sites. A variety of activities — ranging from single facility visits to multiday tours including several sites — should be available year-round. Activities initiated by communities could include folk festivals, craft fairs, exhibitions, artists in residence, vernacular museums, costumed interpretation, skills workshops, ethnic music, dance and theater, walking or driving tours through ethnic neighborhoods and scenic landscapes, tours of churches and restored structures, and visits to bed-and-breakfasts or restaurants to sample local foods. Visitors should also find opportunities to explore other areas of the region on their own and to participate in hands-on activities such as archeological digs at industrial sites, building restoration, and artifact stabilization.

The heart of the visitor experience throughout the region should be stories of the people, told through first-person accounts that create a personal, interactive opportunity to understand the Keweenaw story. Interviews of people associated with the mining industry, who worked in the mines, and who lived in the mining communities should be available on video. Many people in local communities might be interested in telling their own stories. Either approach provides visitors opportunities to learn about the Keweenaw mining story and everyday

life in the copper country from those who knew it best.

RELATIONSHIP TO OTHER PLANNING EFFORTS

Success in preserving the park's historic and architectural resources will depend on the collective actions of many groups and individuals, including government officials, land developers, builders, bankers, community service organizations, and private property owners. Among these various interests, local government plays a key role; it holds the legal authority to regulate the maintenance and growth of the physical environment within its jurisdiction. In addition, community and economic development projects sponsored by local governments — and often undertaken in concert with state and federal agencies — frequently affect the built environment, as in the case of street improvement and public facilities projects.

Under Michigan's Local Historic Districts Act, local government units can adopt ordinances that allow for the creation of a commission composed of local residents who can designate structures and districts of historic significance, regulate work done on designated buildings, and establish and implement goals and objectives for preservation in the community. Historic district ordinances are recognized as the most effective tools for preserving a community's historic resources.

The need for an historic district ordinance was officially recognized by the Calumet community and government units in 1993, when a historic district study committee was formed to begin developing a local preservation program. Through a partnership effort involving the three local government units, the state historic preservation office, the Western Upper Peninsula Planning and Development Regional Commission, and the National Park Service, a survey of properties of Calumet Village, Calumet Township, and Laurium was undertaken. After the completion of this required first step in the

ordinance development process, in September of 1996, Calumet Township trustees enacted a historic district ordinance. Work is now underway to implement the ordinance through the designation of a historic district, the adoption of design guidelines, and the appointment of a commission. Progress has also been made on establishing a similar ordinance for Calumet Village.

Other local land use and aesthetic regulations can also support preservation efforts. Within the park's Calumet Unit, Calumet Township and Calumet Village have enacted zoning ordinances. Although specific regulations vary, each ordinance establishes use districts; regulations for signs, parking, and building height and bulk; and procedures for permitting, administration, enforcement, and appeal. There are no comparable controls for land and building development within the Quincy unit of the park, which lies in Franklin and Quincy Townships.

While in general there is a lack of strong regulatory mechanisms in place to control incompatible development in and around the park units, local interest in comprehensive land use planning has been increasing. As an outgrowth of a community strategic planning effort in the Calumet-Laurium area during 1993, the Western Upper Peninsula Planning and Development Commission, the National Park Service, and several business and community representatives presented a series of workshops in April 1994. These workshops were held to assess the willingness of the residents in several jurisdictions of northern Houghton County to develop a comprehensive growth management program. At all of the meetings, strong support was expressed for land use planning as a key tool in protecting the area's assets. Workshop participants also agreed that the success of such efforts would depend upon a high degree of control by residents in developing and implementing regulations.

Building upon these workshops, a series of public information sessions were held in fall 1996 to introduce local residents to specific

planning tools and techniques used effectively by other Michigan communities. This project, jointly sponsored by several public service and environmental groups, also included a survey of county residents, assessing their views on specific issues related to land use planning and the preservation of community character.

Another planning effort that could positively impact the park is a study of the U.S. Highway 41 corridor between the Quincy and Calumet units, which was organized by the Western Upper Peninsula Planning and Development Regional Commission. The study will provide recommendations for ensuring that building development within the corridor protects and enhances the historic, scenic, and recreational potential of the highway as a link between the park units. A first phase of the study — an inventory including data related to property ownership, zoning, and historic resources — has already been completed.

In addition, a number of planning studies completed during the past 20 years by various private groups and government entities can serve as references in guiding current planning efforts. Notable examples of these documents include the following:

- *The Michigan Copper Mining District: Historic Resources Management Plan* (WUPPDR 1990) establishes historic themes for the region and relates sites to these themes, with suggestions for interpretation and management.
- The 1979 *Calumet Downtown Historic District Plan* gives recommendations for actions to preserve and protect the historic character and economic viability of Calumet's downtown area.
- The *Overall Economic Development Program Update*, published by the Western Upper Peninsula Planning and Development Regional Commission in 1994, provides an analysis of the area's natural, economic, cultural, and social resources and presents goals and objectives for regional economic development.

The activities of local development authorities, as well as other economic and community development initiatives, can also impact historic resources. As provided by Michigan law, Calumet Village and Calumet Township have created Downtown Development Authorities, which levy additional taxes on property owners within these districts to raise revenues for special projects. The Calumet Village authority, for example, is currently assisting in the funding of a project that will restore original brick paving along the village's primary commercial street. Within Calumet Township, a 70-acre parcel near the park has been designated as part of a Renaissance Zone, a state-created initiative intended to spur economic development through tax abatements. Other projects in the park sponsored by local government units — including housing and infrastructure rehabilitation in Calumet — have been funded through federal grants, which require a review to determine the project's effect on the historic resources.

The Michigan Department of Transportation is completing the purchase of about 20 acres of property adjacent to the existing Al and Ellie Isola turn-out/overlook. The objective of this purchase is to protect this acreage from incompatible development. The state may consider constructing a small visitor information facility, including public restrooms, at this location in the future. Keweenaw National Historical Park would need to be involved in planning for this type of facility to ensure that park resources are protected because this property is adjacent to the park boundary. Such a facility might also be considered as a partnership endeavor with the state. Additional planning would be needed before this concept could be developed.

Alternatives, Including the Proposed Action

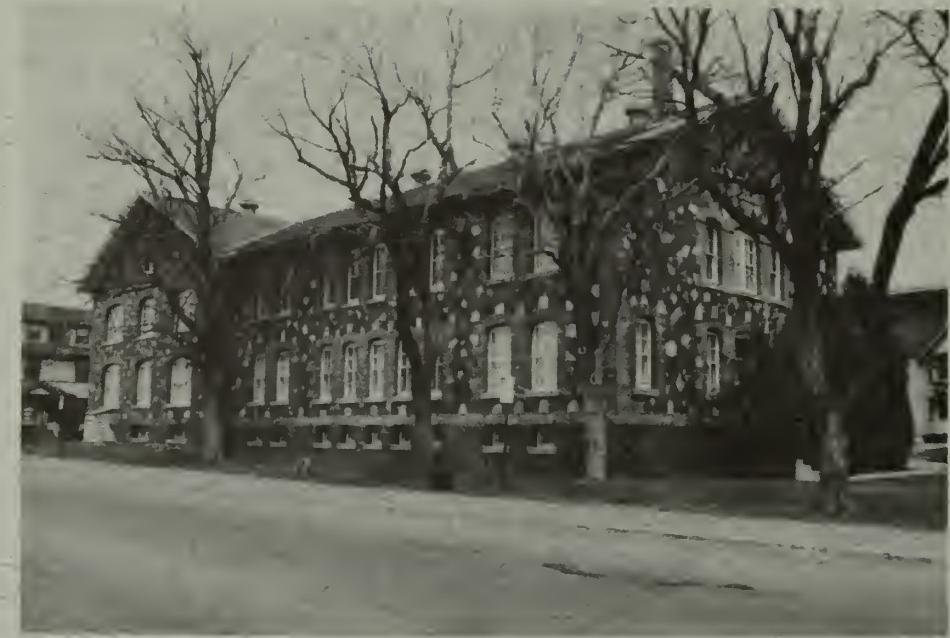


Corner of 5th Street and Pine, Red Jacket, Calumet, circa 1915.



Looking North from Elm Street, West side of 5th Street, Calumet, circa 1917.

Photos courtesy of the Michigan Technological University Archives and Copper Country Historical Collections, Roy Drier Collection.



*Calumet and Hecla,
general office building,
(now Calumet Clinic).*



*Calumet and Helca,
mining captain's office.*



*Calumet and Helca,
gear house and electric shop.*

INTRODUCTION

This *Draft General Management Plan* presents four alternative approaches for the future management of Keweenaw National Historical Park.

Alternative 1 — Continuation of Existing Management Circumstances (No Action)

Alternative 2 — Community Assistance

Alternative 3 — Traditional Park in Core Industrial Areas

Alternative 4 — Preferred Alternative

There are also some actions that would be undertaken under any of the alternatives, and these are described in the “Actions Common to All Alternatives” chapter.

Of the four alternatives, the first presents an approach of continuing the current circumstances and trends in park management and development. The other three offer a distinct change over time from existing circumstances. Alternative 2, the community assistance alternative, focuses on the National Park Service accomplishing the vision for the park through a phased financial and technical assistance program to the community, with ultimate NPS ownership of at least one structure in each unit for visitor orientation and park administration.

The traditional park, alternative 3, focuses on the National Park Service providing technical and financial assistance primarily for the core industrial areas of the park and embarking on an acquisition and protection program that would strive to preserve many of the significant

structures in the core industrial area, including at least one structure in each unit for visitor orientation and park administration facilities.

Alternative 4, the preferred alternative, would blend the community assistance (alternative 2) with a refinement of the traditional park alternative (alternative 3) as the best approach for accomplishing the vision for the park. The summary table (table 1) at the end of this chapter summarizes each alternative for comparative purposes.

The alternatives are purposely broad in their guidance. This is to allow flexibility in how they are implemented. Because full implementation will take many years, resource conditions and opportunities may change over time, and the final selected alternative must be adaptable to those changes.

It is beyond the scope of this plan to provide the specifics necessary to give cost estimates for the development of facilities. Instead, development costs will be determined on a case-by-case basis at the time more detailed designs or development concept plans are produced and when there is a reasonable degree of assurance that money will be available for implementation. Costs associated with staffing and assistance programs are included in the discussion of each alternative.

On a comparative basis, in general, it will be more expensive to implement alternative 3 than the other alternatives due primarily to the land acquisition and development proposals and the additional staff that such a capital investment would necessitate.

ACTIONS COMMON TO ALL ALTERNATIVES

The following actions would be common to all alternatives.

COMMISSION OPERATING AUTHORITY

The National Park Service would work with the Michigan congressional delegation to draft the necessary language to amend the park's establishing legislation which, when approved, would allow the park's commission to implement its operating authorities as intended in the original legislation.

It must be understood, however, that the National Park Service has no control over the legislative process, and it could take considerable time before the amendment is passed by Congress and signed by the president. Until then, the National Park Service would assume the operating authorities of the commission that were necessary to ensure orderly operation of the park and its programs and activities.

COOPERATING SITES / COOPERATIVE AGREEMENTS

Cooperating Sites

Keweenaw National Historical Park cannot hope to encompass within the geographic boundaries of the park all of the significant components of the story of the development of the natural and cultural resources in the area locally known as the "Copper Country." The story of the mining, the people, and the culture that grew up around it can best be told by cooperatively working with partners in education and interpretation. This would be done through the concept of cooperating sites, which would be limited in number but which would represent very significant portions of the natural and/or cultural history of the area. Each site must represent a unique story that integrates into the park story.

The previously established cooperating sites for Keweenaw National Historical Park are, and were meant to be, informal arrangements that allow the park and the individual sites to mutually benefit from a loosely defined goal of telling the natural and cultural stories of the park and of the region to benefit visitors.

Cooperating sites are not recognized as official units of Keweenaw National Historical Park. Although cooperating sites would be eligible for professional consultative assistance from the National Park Service and would display a sign recognizing them as a cooperating site, designation as a cooperating site would not guarantee that the site would receive funding or material assistance from the National Park Service. Such sites would, however, be eligible for such assistance from the commission and the partnership described elsewhere in this document.

The National Park Service would assume no liability for the sites or for the maintenance or safety of the sites. If a site fell below the professional standards of education, interpretation, or safety expected by the superintendent of Keweenaw National Historical Park, the cooperating site designation would be removed.

Cooperative Agreements

The National Park Service does have legislated authority to enter into cooperative agreements with owners of nationally significant historic properties inside the park's boundaries. Such resources would be eligible for specific financial and technical assistance regardless of whether the particular site was designated a cooperating site.

The provision of such specific technical and financial assistance would be established through a formalized cooperative agreement with the respective owner(s). Cooperative agreements are legal contracting instruments and would not automatically carry an official

designation that the respective site be recognized as a cooperating site.

ACQUISITION OF PROPERTY

All alternatives propose that the National Park Service lease, acquire, or otherwise protect properties within the boundaries of the park, primarily within the industrial core areas of the Calumet and Quincy units. In addition to fee-simple acquisition, other protection measures available to the National Park Service include less-than-fee acquisition (scenic/facade easements); purchase and lease- or sell-back; donation/bargain sale; and assisting another private or public entity to purchase a particular property.

As discussed in section 4 of the park legislation, the secretary of the interior can acquire lands or interests in lands within the boundaries of the park by donation, purchase with donated or appropriated funds (prices based on fair market value), exchange, or transfer. Any property owned by the state or any political subdivision of the state, may be acquired only by donation. Further, the legislation also states that

No lands or interests therein within the boundaries of the park may be acquired without the consent of the owner, unless the Secretary determines that the land is being developed, or is proposed to be developed in a manner which is detrimental to the natural, scenic, historic, and other values for which the park is established.

Other federal laws, policies, and processes impact land acquisition decisions. For example, as discussed in the “Current Issues” section, the language in the park’s legislation prohibits the National Park Service from acquiring any property within the park that is contaminated by hazardous materials. Note that for all alternatives in this plan, the National Park Service proposes that this language be removed from the legislation. The National Park Service would

work with the Michigan congressional delegation to help accomplish this. The park would then fall under other existing guidance, including the Department of Interior policy 602 DM 2, section 2.4, that states the following:

It is Departmental policy to minimize the potential liability of the Department and its bureaus by acquiring real property that is not contaminated unless directed by the Congress, court mandate, or as determined by the Secretary.

If acquisition were deemed appropriate, the National Park Service would need to conduct preacquisition environmental site assessments; determine the nature and extent of contamination and the potential cost of remediation; weigh the benefits of acquisition against relevant costs; and acquire the approval of the authorized government official. It is important to note that the NPS Park Facility Management Division policy greatly restricts funding for remediation at sites acquired in violation of the 602 DM 2 mandate.

In the future, a land protection plan (see “Future Plans and Studies Needed” chapter) would establish priorities for acquisition of lands or interests in lands. Until a land protection plan can be developed, the following criteria would provide general guidance in determining the appropriateness of a property for acquisition, or any other proactive NPS role in its protection:

- * The proposed use is compatible with the park’s mission, purpose, and significance, e.g., resource preservation or enhancement of the visitor experience.
- * The property has historic significance
- * the property is important for park operations.
- * There is a risk of loss of historic fabric and integrity, including cultural landscapes and historic views.
- * The property helps to illustrate one or more park interpretive themes.

- * It is financially feasible not to just acquire, but also to remediate any contamination and preserve, use, and maintain the property.

RELATIONSHIP TO ISLE ROYALE NATIONAL PARK

Keweenaw National Historical park would remain a distinct and separate national park system area with its own superintendent, budget, and core staff. However, to accomplish economies in operation, there would be considerable cooperation and support between Isle Royale National Park and Keweenaw National Historical Park. This is a logical arrangement given the proximity of the two parks and the need to conserve dollars and other resources necessary for park operations. The support would be most evident in the area of administrative services, where the current situation of using Isle Royale National Park administrative staff to provide comprehensive services to Keweenaw National Historical Park would continue. Other areas of shared staff support might include resource management, interpretation, and maintenance. This inter-dependence between the two parks would result in the most effective sharing of all services and expertise.

The superintendent of Keweenaw National Historical Park would have the full responsibility for managing the park but would administratively answer to the superintendent of Isle Royale (rather than directly to the regional director). This relationship would provide more unified representation of and strengthened advocacy for Keweenaw National Historical Park issues and concerns while giving the superintendent of Keweenaw National Historical Park a significant level of independence and autonomy.

OSCEOLA #13 COMPLEX

The Osceola #13 shaft complex is a major visual feature on the approach to the Calumet unit. Because most of the machinery represents a

more modern period in mining history, its interior could serve as a key interpretive focus for the evolution of mining technology. The *Calumet Concept Development Plan* (Calumet Township Strategic Plan Committee 1995, see appendix G) notes the potential of Osceola #13 for surface interpretation opportunities and as a tie-in with the southern end of the Calumet unit. Therefore, under any alternative, the National Park Service would work cooperatively with the owner and the community to preserve and interpret the complex, within the context of the overall priorities.

If the owner chose to sell the existing equipment, the National Park Service would work with the owner to ensure the chance to document the machinery through its Historic American Engineering Record program.

MANAGEMENT ZONING

The National Park Service has developed a land classification system for units of the national park system that specifies the particular park's land use and management emphasis. There are four major management zones: natural, historic, park development, and special use. In general, because Keweenaw is a historical park, the major management zone would be a historic zone with various subzones to differentiate management emphases. However, for the most part, the National Park Service does not designate management zones for lands within national park system units that it does not own or actively manage. Therefore, until the National Park Service begins its acquisition and land management program, it would be premature for this management plan to designate land management zones for Keweenaw National Historical Park.

CARRYING CAPACITY

The amount and kind of visitor use permitted at the park and the quality of the visitor experience must be influenced by and balanced with the

need to preserve and conserve the historic structures, archeological sites, and landscapes. The proper carrying capacity for the site and strategies for not exceeding this capacity would be identified in future, less conceptual planning documents.

ALTERNATIVE 1 — NO ACTION

CONCEPT

The resources currently available to the park to provide for staffing, resource management, and interpretation activities are either static or shrinking. This alternative projects these conditions into the foreseeable future, leaving the National Park Service in primarily a caretaker mode of operation. Federal funding would remain minimal. This is the current trend in conditions at the park and, while not an alternative that adequately responds to the vision and objectives for the park's future or the establishing legislation, this alternative provides a baseline for comparing the other alternatives.

VISITOR EXPERIENCE AND INTERPRETATION

Visitors to the park would continue to rely primarily on the interpretive services provided by cooperating sites and groups like the Quincy Mine Hoist Association and Coppertown USA to learn about the historic resources and the history of copper mining on the Keweenaw. Calumet would remain primarily a self-discovery area, although some information would be available at park headquarters, at the chamber of commerce, and through programs offered at the Calumet Theatre. A seasonal NPS interpreter might be hired if funds were available. That person at a minimum would provide guided interpretive walks in one or both units.

FINANCIAL AND TECHNICAL ASSISTANCE

Local Preservation Ordinances

The community would need to continue its efforts to establish local historic districts and preservation ordinances. There would be some technical assistance available from the National Park Service as staff and budget allow, which

would primarily take the form of helping facilitate and coordinate the community's process of establishing ordinances. This effort would be of critical importance and would remain a priority for the park even with the limited resources. If ordinances were established, an administrator would need to be funded by the community to ensure adequate oversight because NPS funds would likely not be available under this alternative.

Other Assistance Efforts

The park's historical architect would continue to provide technical assistance for resource preservation through both hands-on assistance and professional guidance on available methods and resources.

Although the establishment of preservation ordinances would improve opportunities for grants, NPS funds for the preservation grant program called for by the legislation would be extremely limited or nonexistent.

NPS ACQUISITION OF PROPERTIES

Under this alternative the National Park Service would not acquire any property by purchase or donation because funding and staff would not be available for acquisition, stabilization, maintenance, or preservation activities.

DEVELOPMENT AND USE OF ACQUIRED STRUCTURES

There would be no acquisition under this alternative.

PARK ADMINISTRATION AND OPERATION

Park headquarters would be in leased office space in Calumet. There would be minimal travel funds available for staff and commissioners to continue program and partnership activities.

IMPLEMENTATION, STAFFING, AND COSTS

Implementation

Because this alternative reflects current trends, there is no implementation plan. However, given the limited resources, the following management priorities could be outlined:

- assist in community efforts to establish local historic districts and preservation ordinances
- formalize cooperative agreements as necessary
- provide technical assistance in resource preservation and interpretation

Staffing

The superintendent is responsible for determining the staffing levels necessary for meeting park goals. The intent is to provide the best resource protection and visitor services within budgetary constraints.

Under alternative 1 the park would likely continue to have the two full-time staff positions — a superintendent and a historic architect. Perhaps other part-time staff interpretive positions could be supported sporadically by special project funds or on loan from Isle Royale in a given fiscal year.

Costs

The park's current operating budget of \$216,000 would continue with no substantive future increases anticipated. Although a budget decrease could occur under this alternative, the budget would likely remain static or increase slightly to adjust for inflation. This budget would primarily cover staff salaries and benefits.

ALTERNATIVE 2 — COMMUNITY ASSISTANCE

CONCEPT

Under this alternative the community would be at the forefront of implementing preservation actions and interpretive and educational programs at sites throughout the park. The National Park Service's role would be to remain primarily in the background, in a support role or providing a comprehensive program of technical and financial assistance to the community to help make their actions a success. NPS support actions, undertaken in partnership with local governments, businesses, nonprofit groups, and other property owners, would range from assistance with preservation ordinances, resource preservation, and preservation grants in the park to assistance in establishing and enhancing educational and interpretive programs, not only in the park's two units but at cooperating sites as well.

VISITOR EXPERIENCE AND INTERPRETATION

As this alternative is implemented, the visitor experience would gradually evolve. At first the visitor would be somewhat dependent on the opportunities available through the outlying cooperating sites and cooperating sites in the park such as the Quincy Mine Hoist and Underground Mine and Coppertown USA. NPS interpreter-led tours and programs would begin to be more available in Calumet as park staffing increased. (See following unit maps.)

As community efforts in preservation grew (with more federal assistance), there would be more and more resources preserved by the community, opening up a richer experience to visitors. More primary sources of information for the park visitor would be offered by the community within the park units in addition to those services offered at the outlying cooperative sites. Gradually, there would be an increase in NPS interpreter-led tours at both

units, and there would be some technical assistance in interpretation available to partners and cooperating sites.

At full implementation, visitors would have a destination visitor facility in the Quincy unit. This preserved and rehabilitated facility would provide visitors general and specific information about the park's stories, resources, and programs, allowing visitors to better orient to the park and plan their time. Visitors to Calumet would find a facility with basic visitor orientation services.

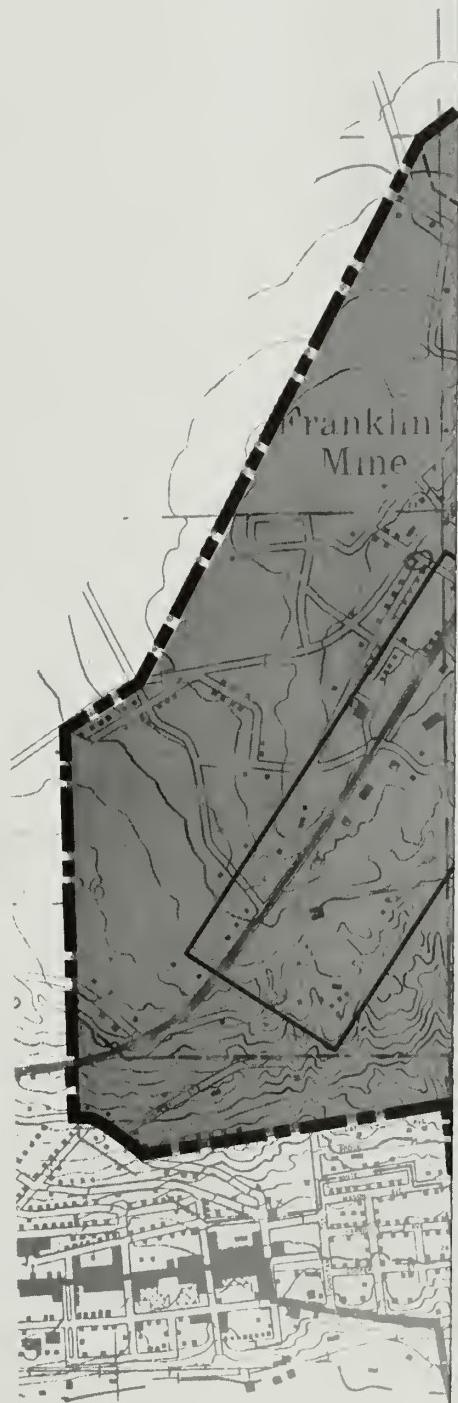
At NPS-owned buildings, all visitors, including those with disabilities, would be able to experience through audiovisual media those elements of the story in the core industrial areas that are not accessible (e.g., underground mining activity).

FINANCIAL AND TECHNICAL ASSISTANCE

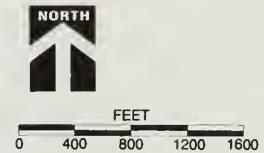
Local Preservation Ordinances

The primary responsibilities for protecting the park's significant resources would be vested in the local governments through the designation of local historic districts and preservation ordinances. The National Park Service would assist in this process in a number of ways.

Initially, additional park staffing would allow for continuing the ongoing baseline inventory and documentation of historical resources in Calumet. This effort would be expanded to include the Quincy unit. (Such documentation is required before the local historic districts and preservation ordinances can be established.) Also, the National Park Service would prepare a cultural landscape report, which would identify which buildings, sites, and other landscape elements contribute and which do not contribute



PRESERVATION
ORDINANCES AND
TECHNICAL AND
FINANCIAL ASSISTANCE



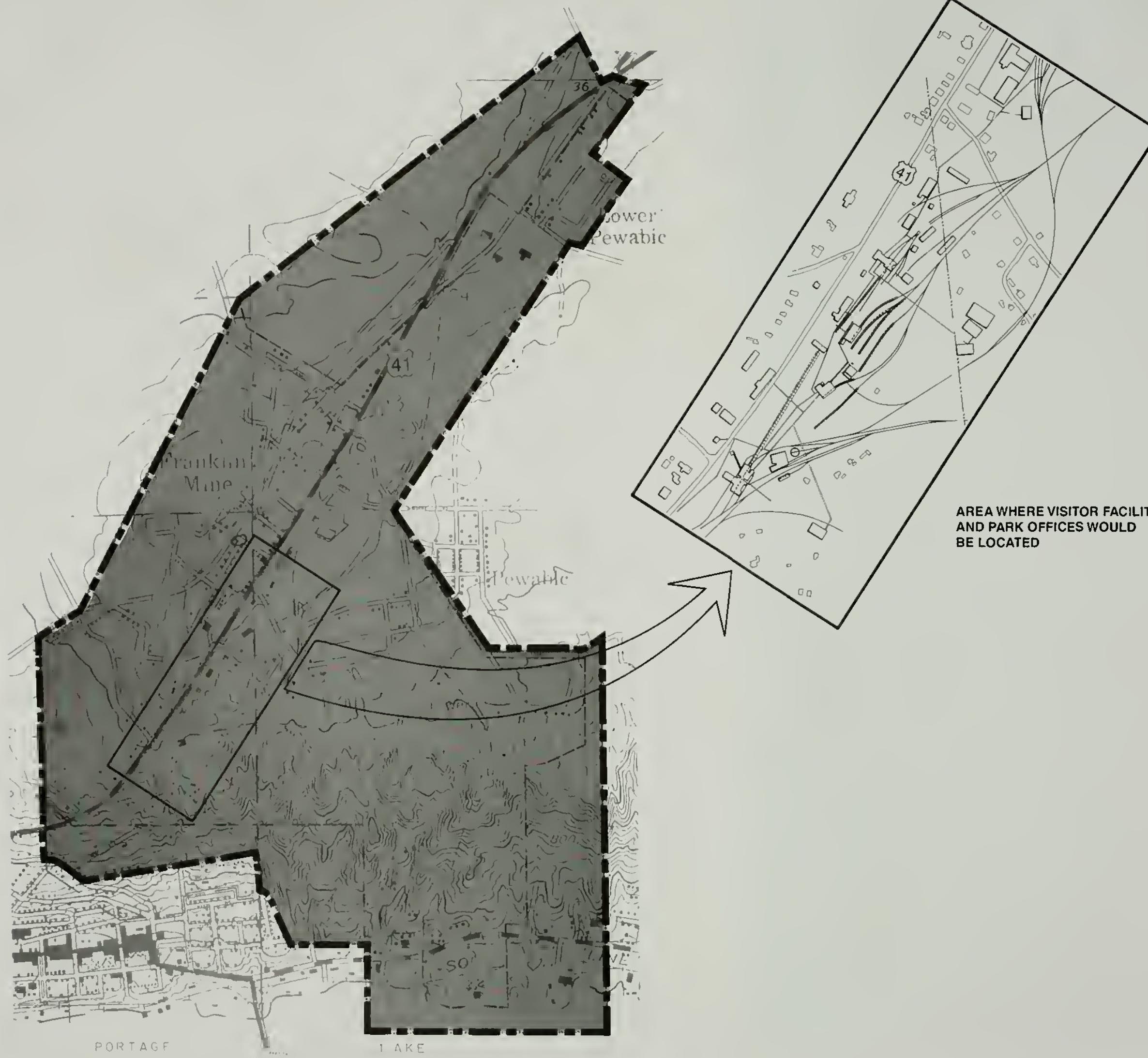
2: COMMUNITY
ASSISTANCE
ALTERNATIVE
QUINCY UNIT
KEWENAW



NATIONAL
HISTORICAL
PARK • MICHIGAN

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NATIONAL PARK SERVICE

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2: COMMUNITY ASSISTANCE ALTERNATIVE QUINCY UNIT KEEWENAW

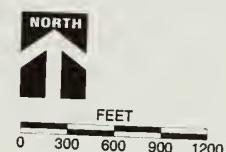


NATIONAL HISTORICAL PARK • MICHIGAN

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PRESERVATION
ORDINANCES AND
TECHNICAL AND
FINANCIAL ASSISTANCE



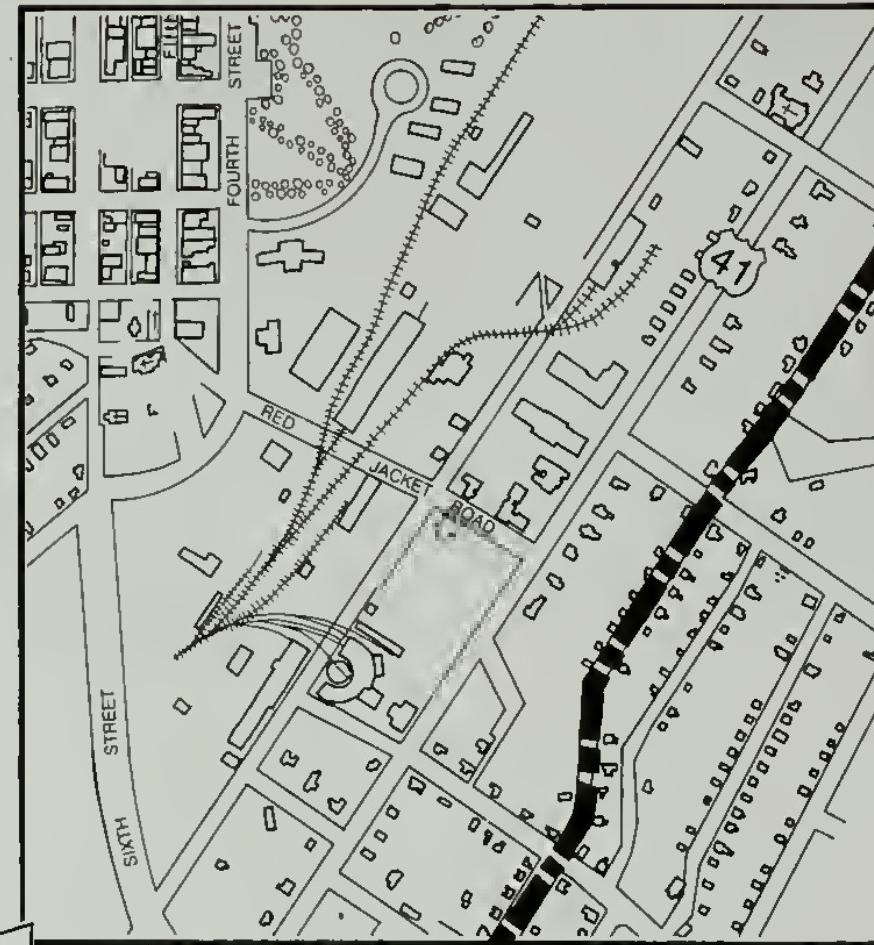
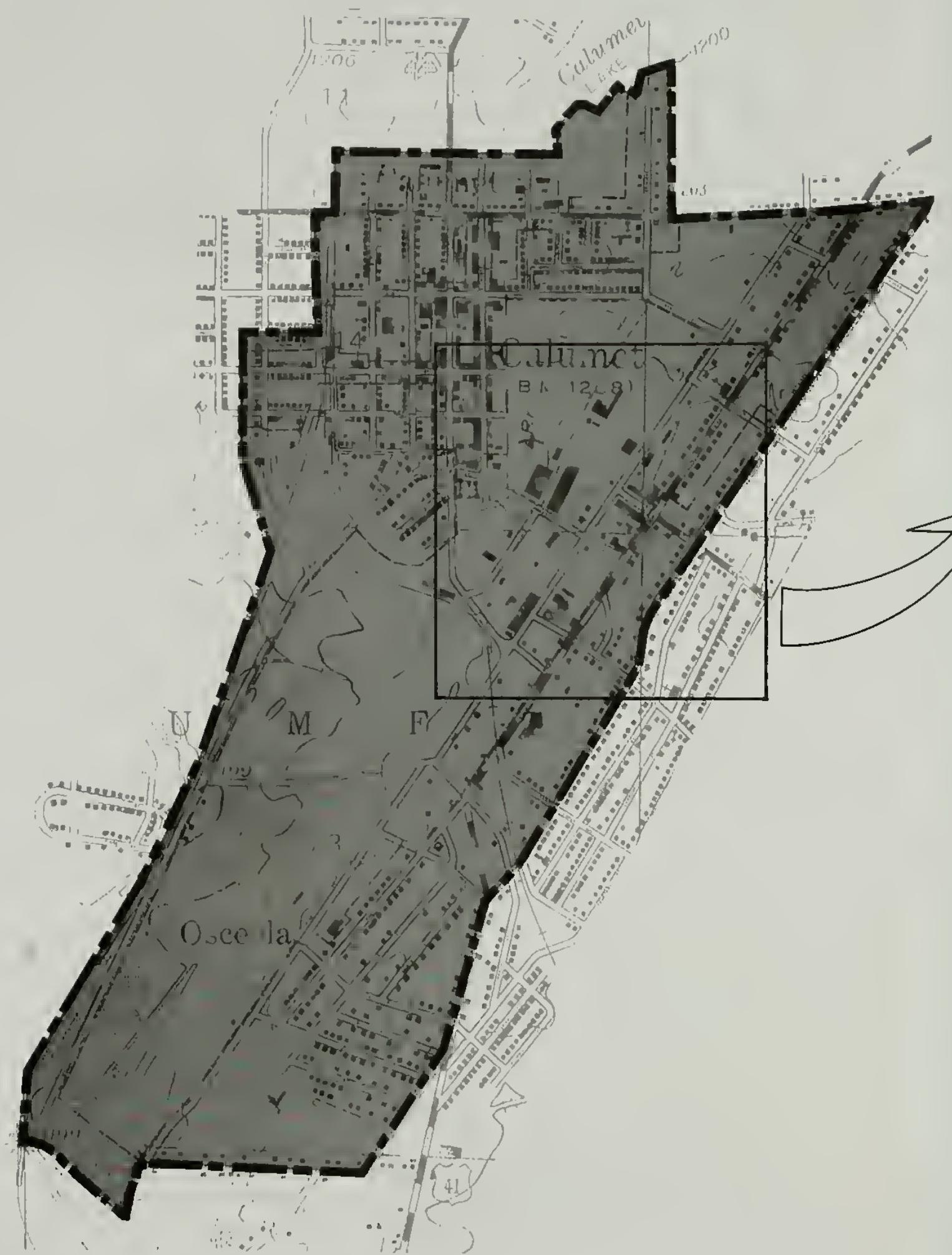
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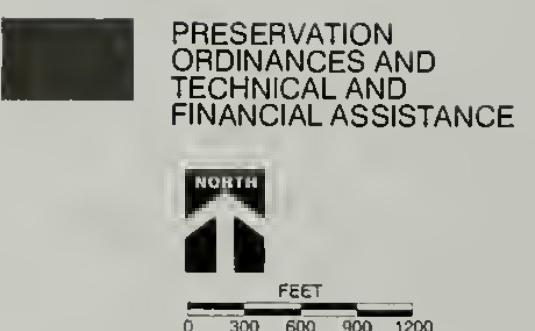
NATIONAL
HISTORICAL
PARK • MICHIGAN

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NATIONAL PARK SERVICE

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AREA WHERE VISITOR FACILITY
AND PARK OFFICES WOULD
BE LOCATED



2: COMMUNITY
ASSISTANCE
ALTERNATIVE
CALUMET UNIT
KEWEENAW



NATIONAL
HISTORICAL
PARK • MICHIGAN

to the park's significance (see "Future Plans and Studies Needed" chapter).

As the staff and funds increase with implementation of alternative 2, the National Park Service would assist the local governments in defining boundaries for locally designated historic districts and drafting preservation ordinances for adoption by local governments. The National Park Service would continue to assist by helping provide design review of preservation proposals submitted to the commission.

Other Assistance Efforts

The cultural landscape report, the current historic resource study effort, and the land protection plan would help provide information for setting priorities for acquisition and other kinds of technical and financial assistance.

Initially, technical assistance for historic preservation would increase over current levels because of being able to hire additional NPS professional and clerical staff. Also, through education and coordination, additional NPS staff would increase the National Park Service's ability to provide professional assistance to partners and cooperating sites in their efforts to organize and implement their park-related projects. Interpretation assistance could come in the form of helping partners and cooperating sites prepare interpretive brochures and displays and teaching interpretive skills.

The park would be prepared to distribute preservation grants as allowed by park legislation. Once the grant program reached a sufficient level (about \$200,000 to \$250,000), the park would fund a preservation district administrator position (nonfederal). At the full implementation level, the park would have an established and active historic preservation grant program.

To fully implement this alternative, the local governments would have demonstrated their

commitment to the partnership by providing or ensuring

- strict ordinances and permitting procedures on buildings and grounds within significant areas of the park
- less restrictive ordinances concerning certain significant housing areas within the park boundaries
- voluntary compliance to published housing guidelines in less sensitive areas of the park
- encouragement for local governments, with the assistance of federal, state, and/or local funds, to provide historic preservation grants to help achieve these goals

NPS ACQUISITION OF PROPERTIES

In the full implementation stage of this alternative, the National Park Service would lease or acquire at least one building in the Quincy unit and one in the Calumet unit. Park headquarters would be in the Calumet unit. If historic buildings are leased or acquired, the buildings would be rehabilitated to preserve their exterior features and modified on the interiors for visitor and administrative uses. The National Park Service would consider, based on the magnitude of potential effects on existing historic fabric, the need for historic structure reports with proposals to protect the significant historic interior and exterior qualities.

DEVELOPMENT AND USE OF ACQUIRED STRUCTURES

Because only limited NPS acquisition or leasing is proposed under this alternative, it would be premature to propose any detailed development and use proposals for the various buildings and properties.

The Calumet Township Strategic Plan Committee, with assistance from U.P. Engineers and Architects, Inc., prepared the *Calumet Concept Development Plan* (1995) that proposes specific uses for many of the buildings in the park's

Calumet unit. The Quincy Mine Hoist Association has a similar long-range plan for its holdings in the Quincy unit. A summary of the Quincy Mine Hoist Association's plan is included in appendix G; the Calumet plan is included in appendix H.

The National Park Service has reviewed the recommendations contained in these two documents and concludes that, based on the information available to date, the recommendations have merit. Consequently, the National Park Service is incorporating these proposals into this *Draft General Management Plan* by reference. Furthermore, because these plans have merit, the National Park Service, through the technical and financial assistance proposals set forth in this alternative, would work with the Calumet Township Strategic Plan Committee and the Quincy Mine Hoist Association, or other current or prospective owners or developers, to implement these plans as appropriate to the overall goals and objectives of the park.

PARK ADMINISTRATION AND OPERATION

A building (or buildings) in the Quincy unit would house administrative offices as well as a destination visitor facility. A suitable building (or buildings) in the Calumet unit would function as the administrative headquarters for the park superintendent and staff and also provide basic visitor orientation. Maintenance services for these structures would be minimal and would be contracted.

IMPLEMENTATION, STAFFING, AND COSTS

NOTE: The following estimates are for the park's operating budget needs and the money needed to provide preservation assistance grants and technical assistance and to assist with interpretive activities through cooperative agreements. These figures do not include money for the hazardous substances investigation;

possible acquisition costs; or rehabilitation, stabilization, or restoration of properties anticipated to occur in the implementation of this alternative. Estimates of those costs will have to be made closer to the actual actions when more information is available.

Implementation

The implementation for this alternative would be phased.

Staffing

The superintendent is responsible for determining the staffing levels necessary for meeting park goals. The intent is to provide the best resource protection and visitor services within budgetary constraints.

In the earliest phase of alternative 2, the need for staffing would be in the areas of clerical support, historic preservation, planning, and interpretation. Within the initial phase of development, a small staff might be adequate for meeting the minimum requirements for visitor services and public health and safety.

In the next phase, the needs for additional staffing would focus in the areas of interpretation, planning, and historic preservation. In the last phase, further full-time staff would be needed in the areas of history, interpretation, and cultural landscape preservation.

Costs

The estimated annual operating costs (see note above) for full implementation of this alternative would be \$1,080,000.

ALTERNATIVE 3 — TRADITIONAL PARK IN THE CORE INDUSTRIAL AREAS

CONCEPT

The traditional park in the core industrial areas alternative, alternative 3, proposes what the name states — a much more traditional park experience in the core industrial areas of each park unit. As funding and staffing levels allowed, the National Park Service would invest substantially in each of the core industrial areas by acquiring significant properties, conducting resource preservation, and adaptively using the structures. The National Park Service would install interpretive media and provide interpretive staff at key sites, establish partnerships, and provide technical and financial assistance to further core industrial area preservation. It would be primarily the community's efforts outside the park's core industrial areas that would determine the level of preservation and type of visitor experience offered, although the park's interpretive services would likely overlap into these areas.

VISITOR EXPERIENCE AND INTERPRETATION

At first, visitors would be somewhat dependent on the opportunities at the cooperating sites. Over time, visitors would be able to depend more and more on finding a very traditional NPS experience in the core industrial areas of the two park units. The cooperating sites would continue to complement NPS services. A building in the Quincy unit would be used (rehabilitated or preserved) as a visitor orientation facility, which would provide most visitors approaching from the Houghton/Hancock area a first destination point. Here they would be informed of the resources and programs offered in both units and at cooperating sites, which would assist in trip planning. Visitors to Calumet would find basic visitor orientation services, possibly in the building selected for permanent park headquarters or in a separate structure. The National Park Service would

guide efforts for protection, interpretation, and use of other significant buildings and structures in the core industrial areas. (See the following unit maps.)

Uniformed NPS personnel would provide interpretive programs in the historic structures and walking tours of the core industrial areas. At NPS-owned buildings, all visitors, including those with disabilities, would be able to experience through audiovisual media those elements of the story in the core industrial areas that are not accessible (e.g., underground mining activity).

The visitor experience outside of the core industrial areas would depend upon various factors. The "park" experience would be optimized if the community (1) established, implemented, and enforced preservation ordinances outside the core industrial areas, thereby maintaining the historic integrity of these areas, (2) invested in the preservation of structures and landscapes, and (3) provided interpretation of resources.

FINANCIAL AND TECHNICAL ASSISTANCE

Local Preservation Ordinances

NPS assistance to the community to establish and administer preservation ordinances would be limited primarily to the core industrial areas of each unit.

Other Assistance Efforts

Under alternative 3, other preservation efforts and grants would be the same as described in alternative 2 except that efforts would be focused on the core industrial areas of the park.

NPS ACQUISITION OF PROPERTIES

As in alternative 2, at least one property in each unit would be acquired for administrative use and visitor services. Park headquarters would be in the Calumet unit. In addition, under this alternative other significant properties would be acquired in the core industrial areas of each unit. Some acquired structures might be made available for leaseback to current owners/tenants or new tenants for continuing existing uses or establishing new uses, if compatible.

DEVELOPMENT AND USE OF ACQUIRED STRUCTURES

As explained in alternative 2, it would be premature to propose any detailed development and use proposals for the various buildings and properties until funding and staff levels are reached that would support an acquisition program.

The Calumet Township Strategic Plan Committee, with assistance from U.P. Engineers and Architects, Inc., prepared the *Calumet Concept Development Plan* (1995) that proposes specific uses for many of the buildings in the park's Calumet unit. The Quincy Mine Hoist Association has a similar long-range plan for its holdings in the Quincy unit. The Quincy Mine Hoist Association's plan is included in appendix G; the Calumet plan is included in appendix H.

As in alternative 2, the National Park Service would work with the Calumet Township Strategic Plan Committee, the Quincy Mine Hoist Association, as well as other current or prospective owners and developers, to implement the proposals in these two plans as long as they meet the overall goals and objectives of the park. In addition, however, because under alternative 3 the National Park Service might acquire or otherwise take a proactive role in the preservation of significant resources within the industrial core area of both units, the National Park Service would also look to these plans for preliminary guidance as it determines treatment

and use of any such properties that could ultimately come under its control.

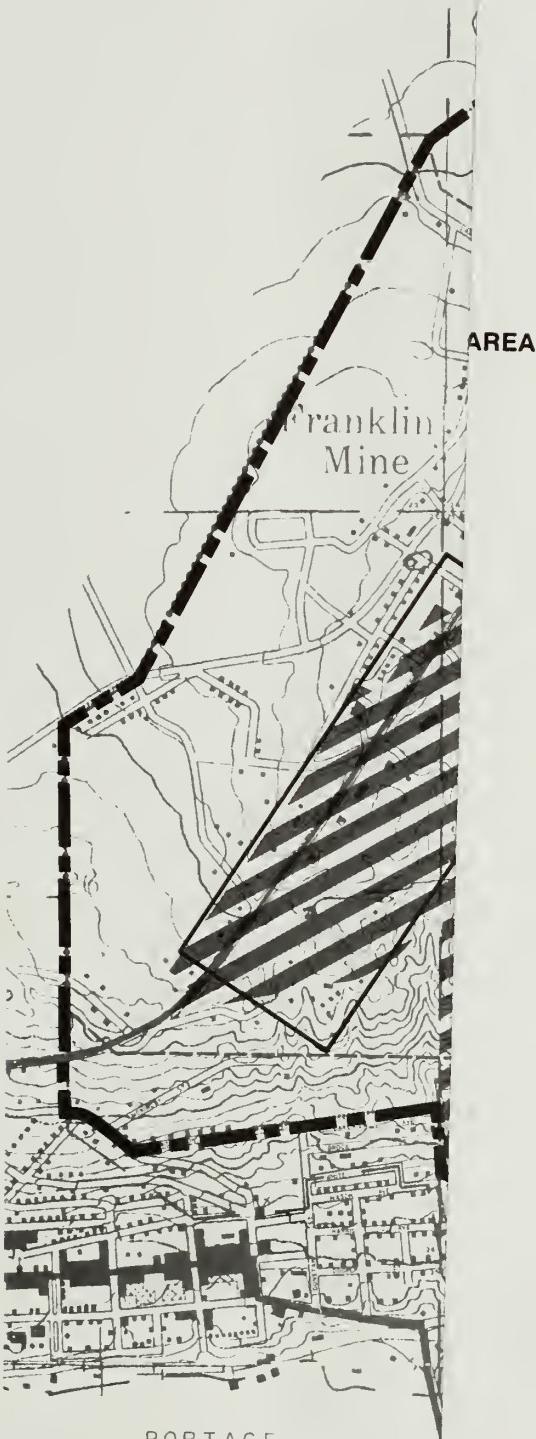
It must be understood, however, that NPS policies and guidelines call for certain types of information as the basis for final decisions about rehabilitation and restoration proposals to ensure the protection of historic buildings and landscapes. As a result, while these plans are included as interim recommendations for treatment and use of buildings in the industrial core areas of the Calumet and Quincy units, preservation needs could dictate changes to these proposals later when more information becomes available.

It must also be understood, however, that, given the uncertainties of the federal budget as it relates to the park, some time could pass between the approval of this plan and the implementation of proposals in this alternative. Therefore, the National Park Service reserves the right to reevaluate the recommendations in the Calumet and Quincy plans at the time that it undertakes a land acquisition program and subsequent advance planning for development. The park would make modifications as appropriate to fit the then current needs, policies, and focus of the National Park Service.

PARK ADMINISTRATION AND OPERATION

As described under alternative 2, a building (or buildings) in the Quincy unit would house administrative offices as well as a destination visitor facility. A suitable building (or buildings) in the Calumet unit would function as the administrative headquarters for the park superintendent and staff and also provide basic visitor orientation.

In addition, under this alternative, because park acquisitions could grow and substantive maintenance responsibilities could develop, the park might require at least one maintenance facility to house maintenance equipment, shops, bulk storage, offices, and worker showers and



CORE INDUSTRIAL AREA



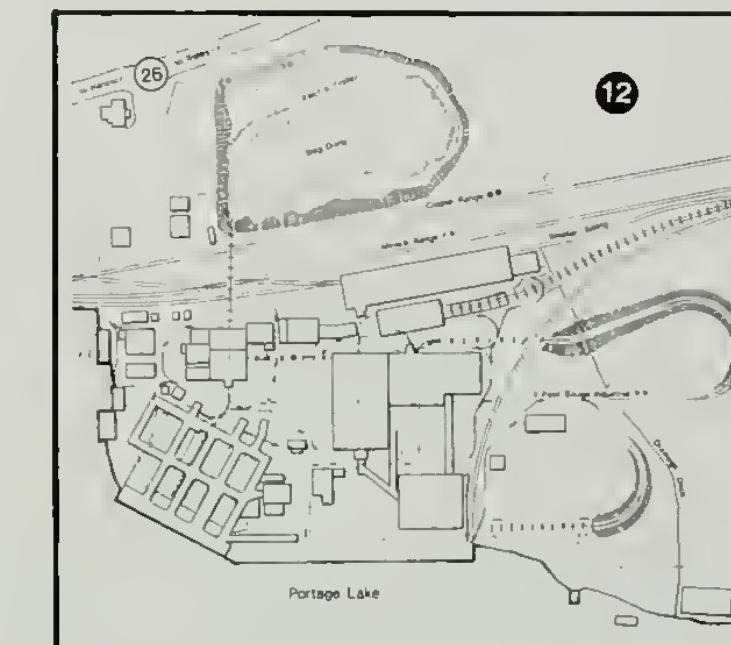
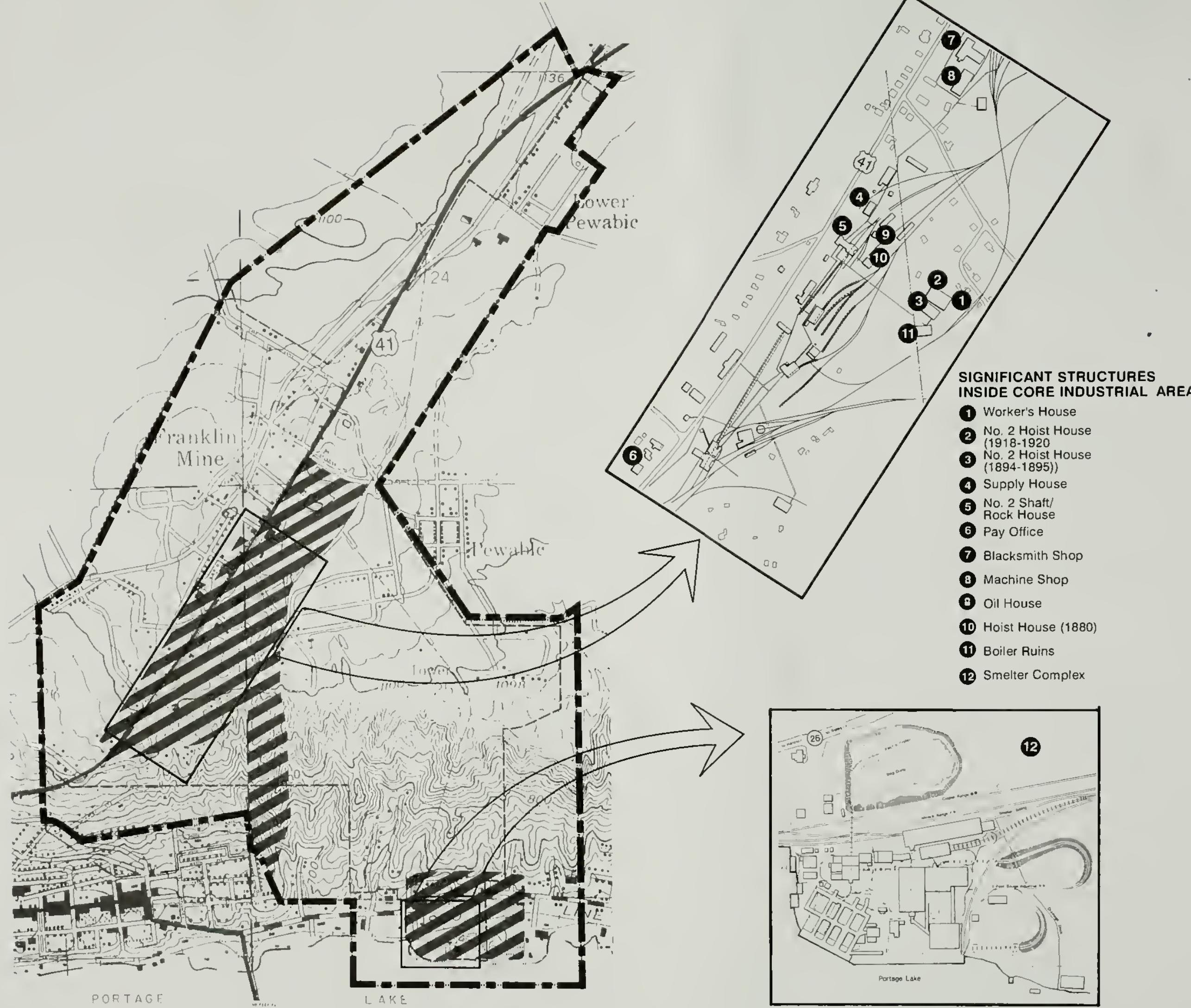
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3: TRADITIONAL PARK IN
CORE INDUSTRIAL AREA
ALTERNATIVE
QUINCY UNIT
KEWEENAW



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**3: TRADITIONAL PARK IN
CORE INDUSTRIAL AREA
ALTERNATIVE
QUINCY UNIT
KEWEENAW**



**NATIONAL
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CORE INDUSTRIAL AREA



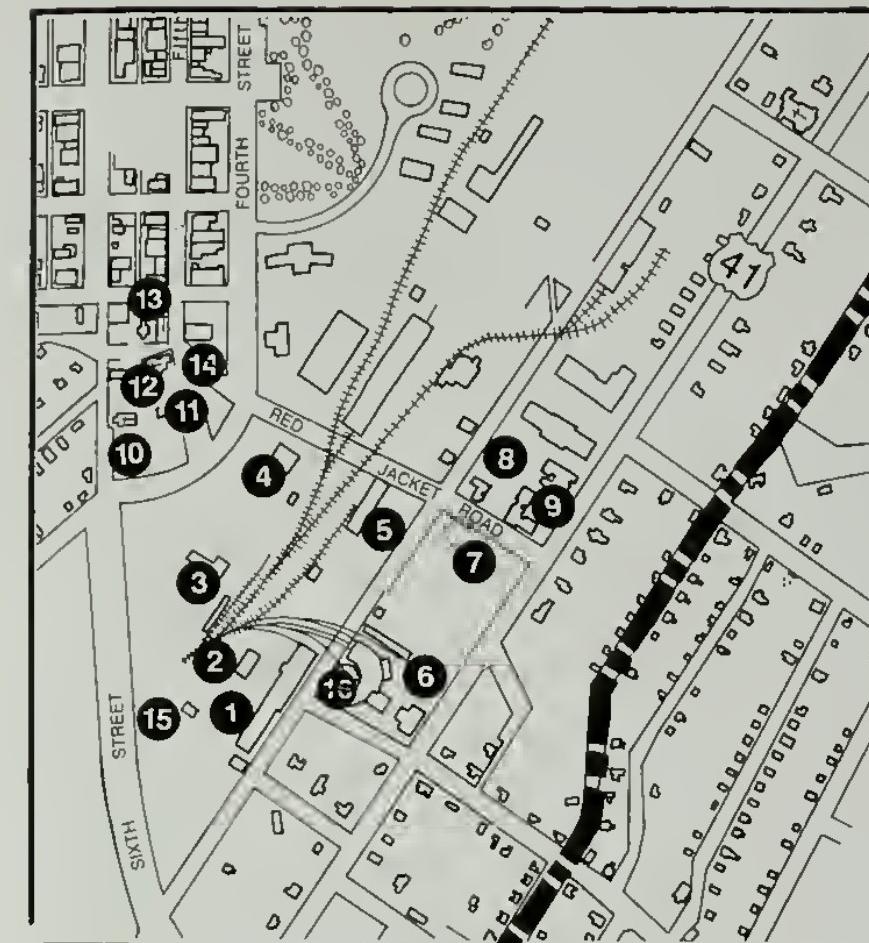
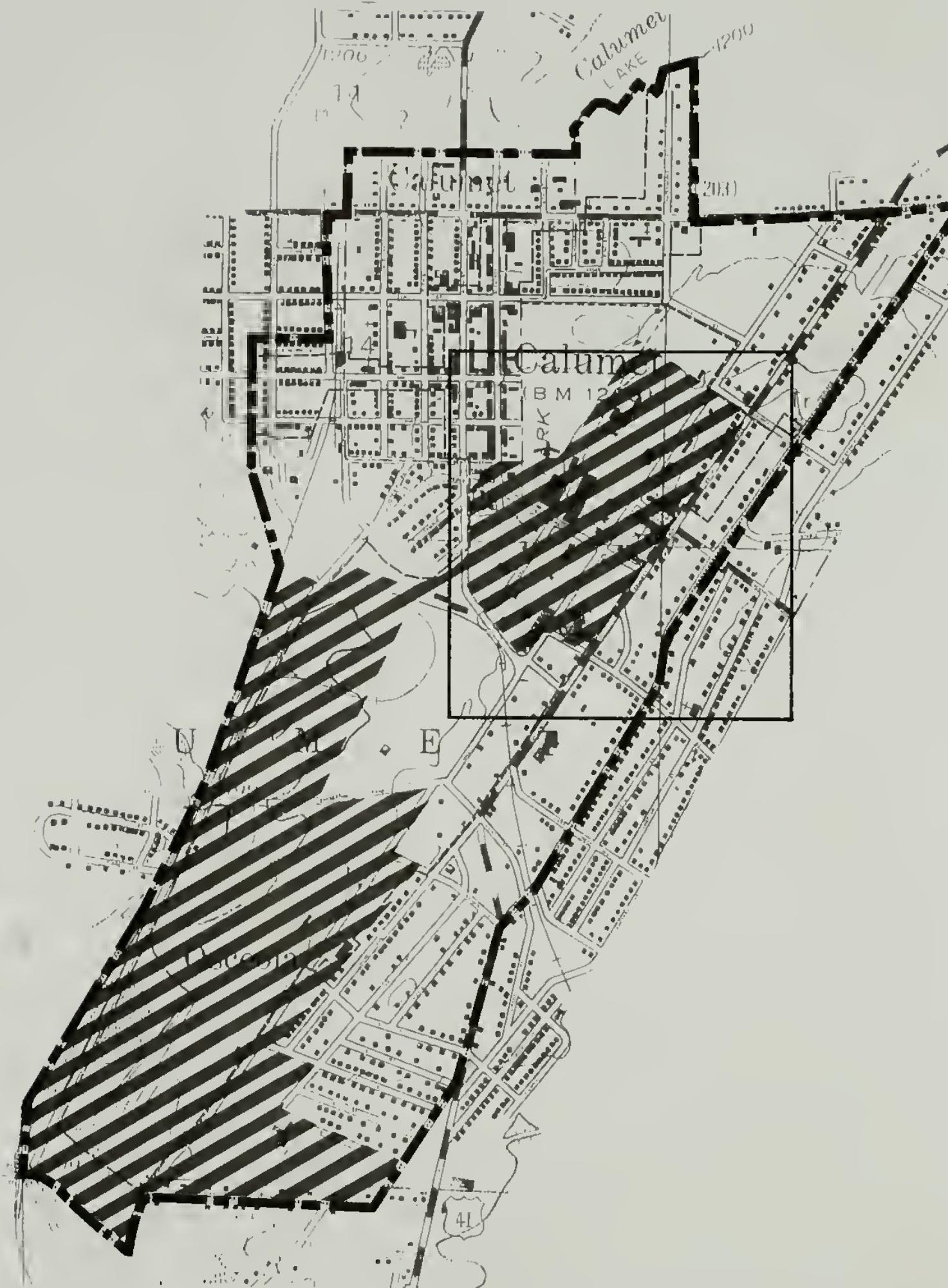
3: TRADITIONAL PARK IN
CORE INDUSTRIAL AREA
ALTERNATIVE
CALUMET UNIT
KEWEENAW



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CORE INDUSTRIAL AREA

SIGNIFICANT STRUCTURES INSIDE CORE INDUSTRIAL AREA

- ① Machine Shop
- ② Blacksmith Shop
- ③ Pattern Warehouse
- ④ Pattern Shop
- ⑤ No. 1 Warehouse
- ⑥ Bathhouse
- ⑦ C & H Library
- ⑧ Agassiz House
- ⑨ C & H Headquarters Building
- ⑩ Swedish Carmel Church
- ⑪ Christ Episcopal Church
- ⑫ First Presbyterian Church
- ⑬ St. Anne's Church
- ⑭ Union Building
- ⑮ Captain's Office
- ⑯ Roundhouse



3: TRADITIONAL PARK IN
CORE INDUSTRIAL AREA
ALTERNATIVE
CALUMET UNIT
KEWEENAW



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lockers. An option would be to explore contracting out maintenance services.

IMPLEMENTATION, STAFFING, AND COSTS

NOTE: The following estimates are of the park operating budget needs and the money needed to provide preservation assistance grants and technical assistance and to assist with interpretive activities through cooperative agreements. These figures do not include money for the hazardous substances investigation; possible acquisition costs; or rehabilitation, stabilization, or restoration of properties anticipated to occur in the implementation of this alternative. Estimates of those costs will have to be made closer to the actual actions when more information is available.

Implementation

As with alternative 2, this alternative could not be implemented overnight and would have to be phased in gradually.

Staffing

The superintendent is responsible for determining the staffing levels necessary for meeting park goals. The intent is to provide the best resource protection and visitor services within budgetary constraints.

This alternative potentially involves more NPS ownership than alternatives 1, 2, or 4, which in turn would require more NPS maintenance and interpretation. Staffing needs would include clerical support and expertise in history, historical architecture, interpretation, and planning. Later, as the acquisition program was implemented, additional staffing needs would be in the areas of resource protection and maintenance.

Costs

The estimated annual operating costs (see note above) for full implementation of this alternative would be \$2,450,000.

ALTERNATIVE 4 — THE PROPOSED ACTION

CONCEPT

This alternative is the National Park Service's preferred strategy for the long-range management of Keweenaw National Historical Park. It is a combination of the technical and financial assistance component in alternative 2 and a refinement of the traditional park idea in alternative 3. The NPS goal would be to create a dynamic national park area where the National Park Service has a strong public presence and, through community assistance, is a contributing member of a very organized and active partnership of local government and community groups. In the long term this alternative would best realize the vision of the park's establishing legislation and provide the broadest level of resource protection and visitor services.

In concept this alternative would be approached by gradually building park funding and the park's staff of professionals to provide increased financial and technical assistance to the partners and cooperating sites and other community groups (as described in alternative 2). Once the park has a strong technical assistance program, the National Park Service would begin a concerted program to acquire or otherwise protect significant properties in the Calumet and Quincy units of the park, as funding and staffing levels permitted.

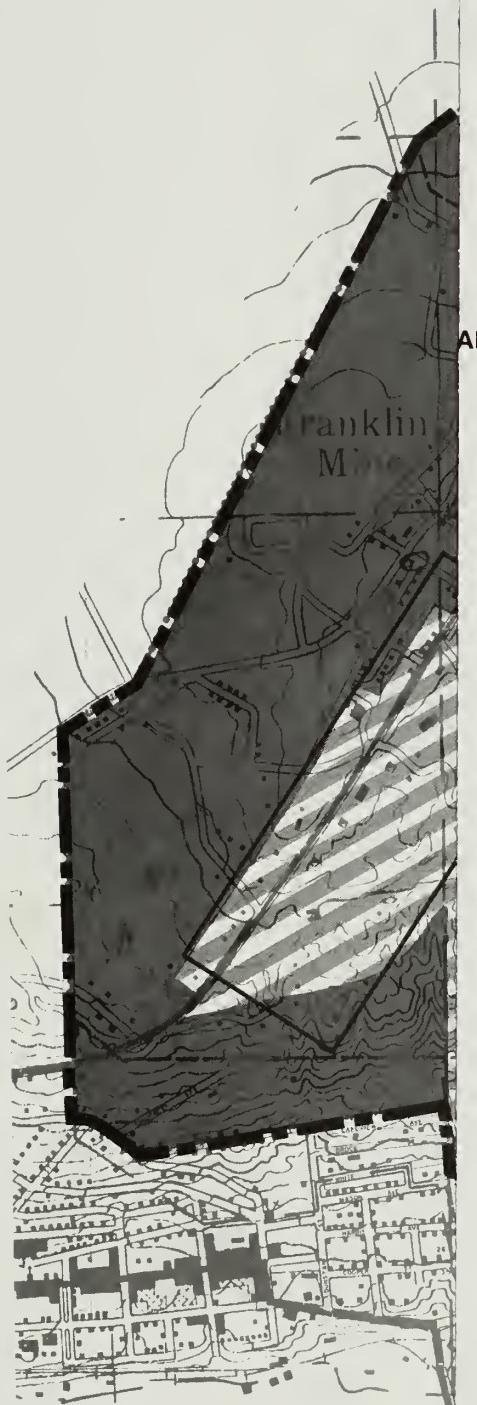
VISITOR EXPERIENCE AND INTERPRETATION

As this alternative is implemented, the visitor experience would gradually evolve. At first the visitor would be somewhat dependent on the opportunities available through the cooperating sites such as the Quincy Mine Hoist and Underground Mine and Coppertown USA. Interpreter-led tours would begin to be more available in Calumet as park staffing increased.

As community efforts in preservation grew with more federal assistance, there would be more and more resources preserved by the community, opening up a richer experience to visitors. More primary sources of information for the park visitor would be offered by the community within the park units in addition to those services offered at the outlying cooperative sites. NPS interpreter-led tours and programs at both units would increase, and there would be some technical assistance in interpretation available to partners and cooperating sites. (See the following unit maps.)

Eventually, a visitor orientation facility would be established in the Quincy unit, which would provide most visitors approaching from the Houghton/Hancock area a first destination point. This facility would provide visitors general and specific information about the park's stories, resources, and programs, allowing them to better orient to the park and plan their time. Basic visitor orientation services in Calumet would also be made available. At NPS-owned buildings, all visitors, including those with disabilities, would be able to experience through audiovisual media those elements of the story that are not accessible (e.g., underground mining activity).

At full implementation, visitors to both units would receive a very traditional NPS experience, with uniformed NPS staff providing interpretation of many of the preserved structures and walking tours of the areas. Further, the concerted efforts of the community and significant federal assistance toward preservation efforts throughout the park would substantially improve the appearance and protect the integrity of park resources, thereby enhancing opportunities for visitors to learn about the park and the region.



AREA



CORE INDUSTRIAL AREA



PRESERVATION
ORDINANCES AND
TECHNICAL AND
FINANCIAL ASSISTANCE



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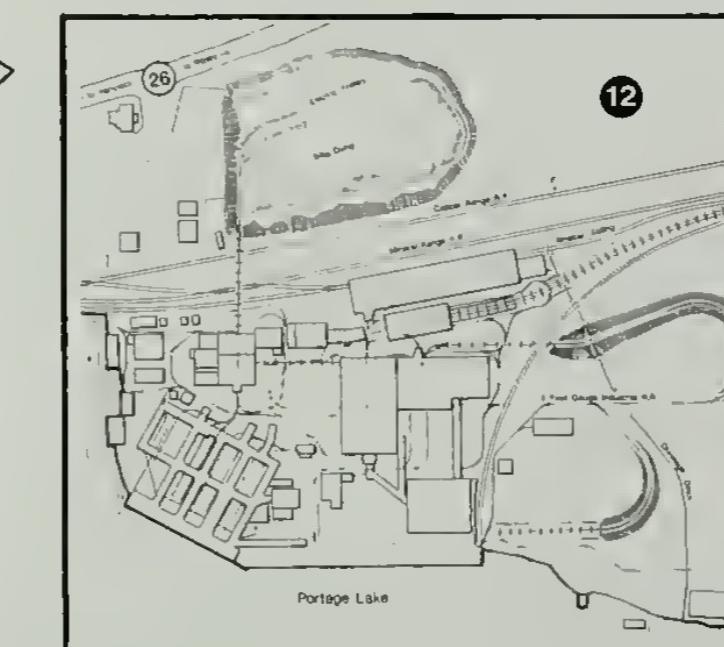
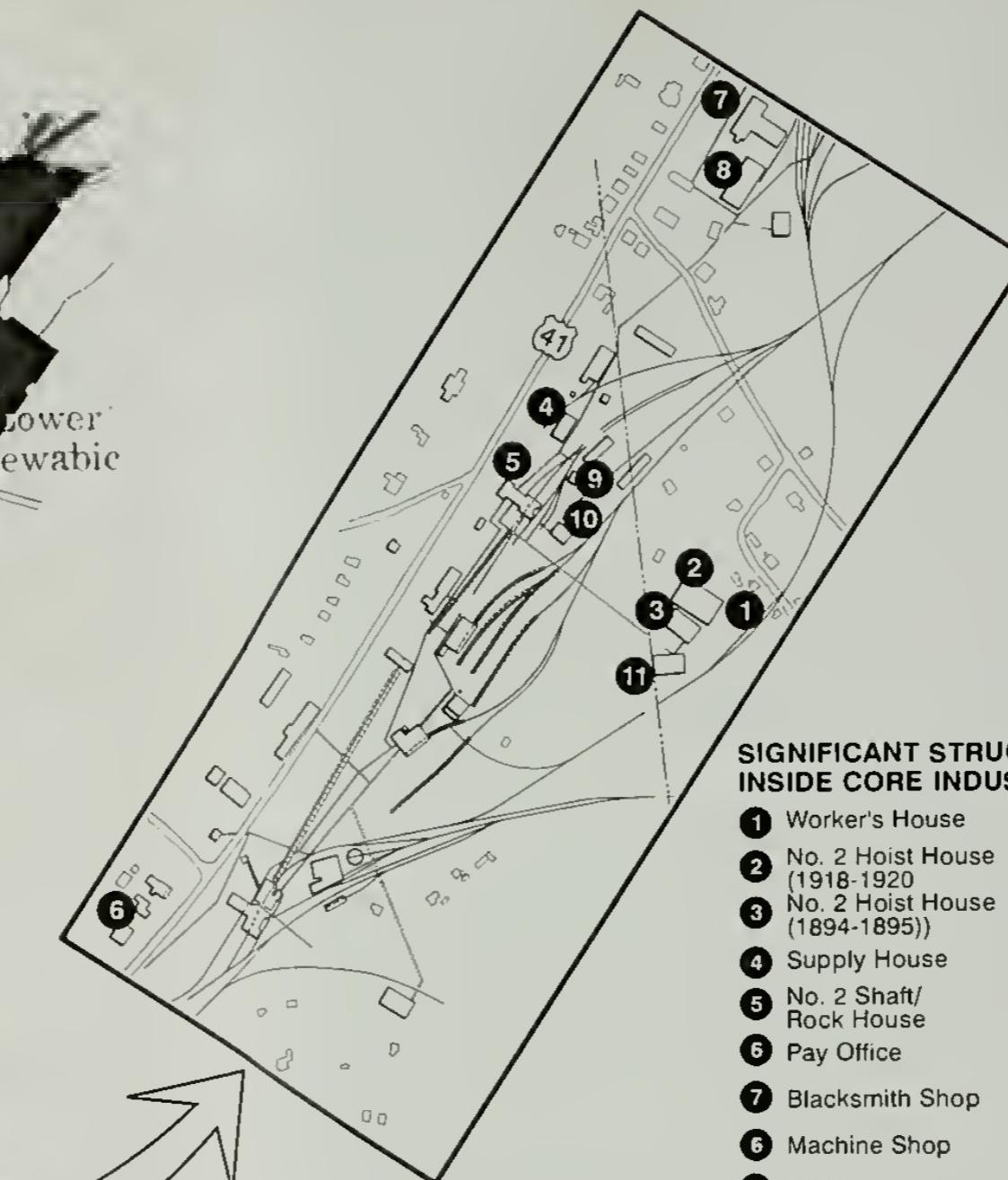
4: PREFERRED
ALTERNATIVE
QUINCY UNIT
KEWEENAW



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PORTAGE



**4: PREFERRED
ALTERNATIVE
QUINCY UNIT
KEWEENAW**



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■ ■ ■ ■ ■ PROPOSED
BOUNDARY CHANGE

The logo consists of a stylized graphic on the left and text on the right. The graphic features four thick, black, diagonal stripes of varying lengths that meet at a single point on the left side. To the right of the graphic, the words "CORE INDUSTRIAL AREA" are written in a bold, black, sans-serif font.

PRESERVATION
ORDINANCES AND
TECHNICAL AND
FINANCIAL ASSISTANCE

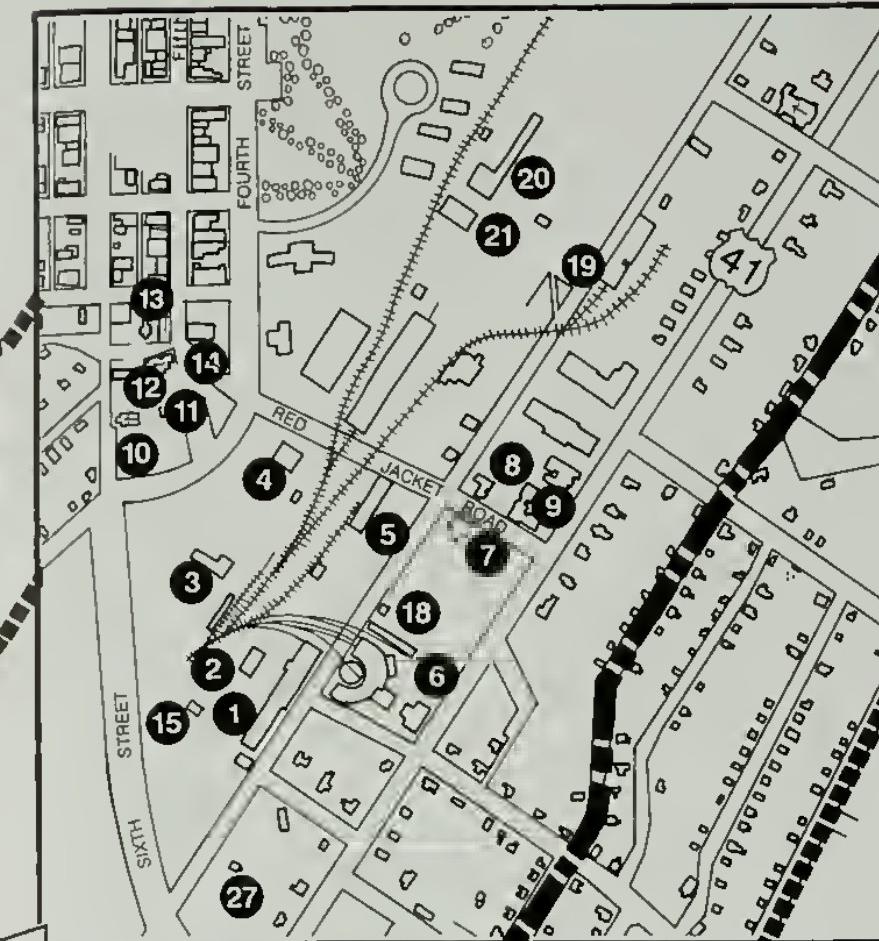
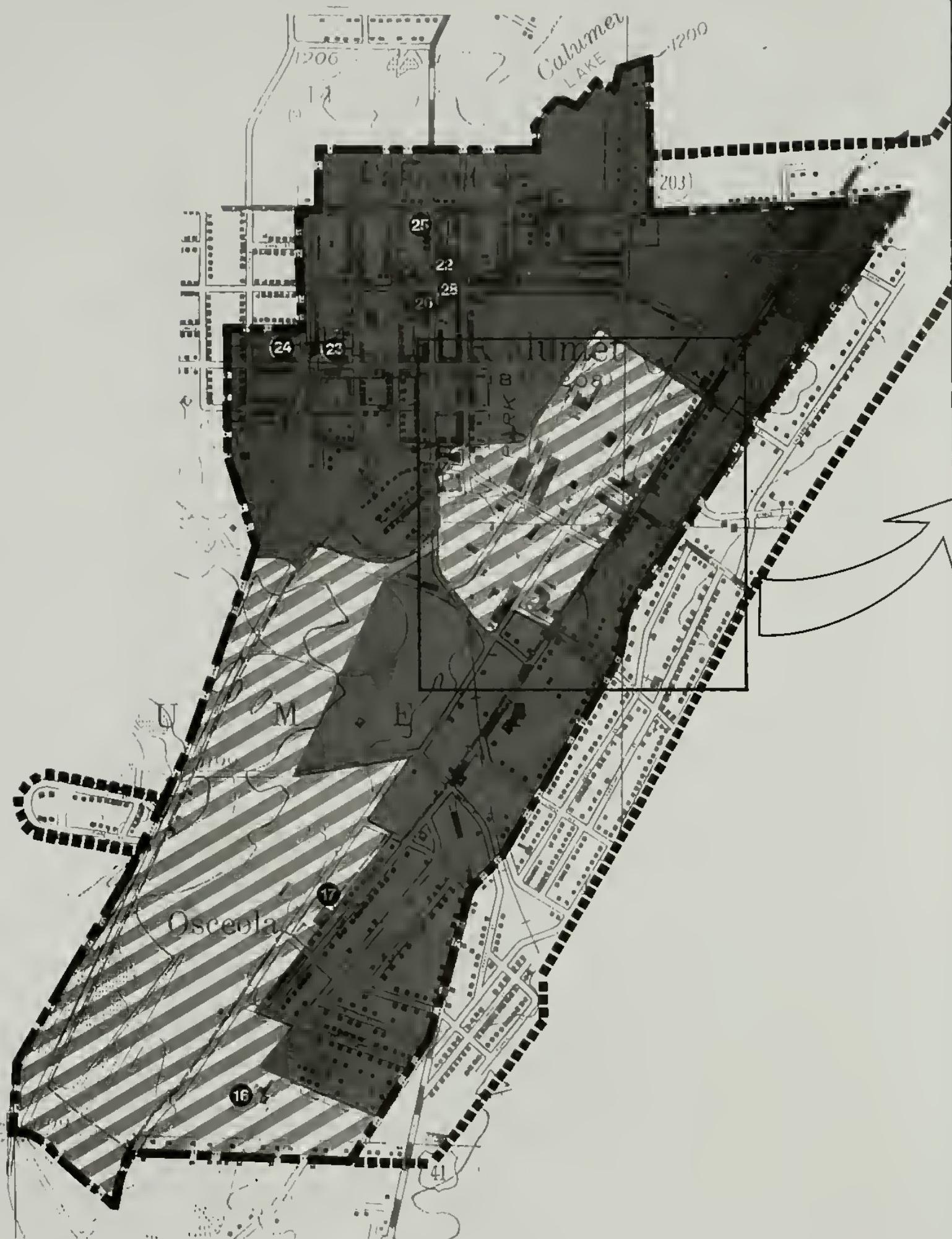


4: PREFERRED ALTERNATIVE CALUMET UNIT KEWEENAW



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NATIONAL PARK SERVICE



SIGNIFICANT STRUCTURES INSIDE CORE INDUSTRIAL AREA

- ① Machine Shop
- ② Pattern Storage
- ③ Blaksmith Shop
- ④ Pattern Shop
- ⑤ No. 1 Warehouse
- ⑥ Bathhouse
- ⑦ C & H Library
- ⑧ Agassiz House
- ⑨ C & H Administration Building
- ⑩ Swedish Carmel Church
- ⑪ Christ Episcopal Church
- ⑫ First Presbyterian Church
- ⑬ St. Anne's Church
- ⑭ Union Building
- ⑮ Captain's Office
- ⑯ Osceola #13
- ⑰ South Hecla Mine Buildings
- ⑱ Paint Shop

SIGNIFICANT STRUCTURES OUTSIDE CORE INDUSTRIAL AREA

- ⑲ Superior Boilerhouse
- ⑳ Drill Shop
- ㉑ Dry House
- ㉒ Calumet Town Hall & Theatre
- ㉓ Train Depot
- ㉔ Italian Church
- ㉕ Italian Hall Adjacent Lots
- ㉖ Fire Hall
- ㉗ Typical Worker's House
- ㉘ Shute's Bar

■■■■■ PROPOSED BOUNDARY CHANGE

■■■■■ CORE INDUSTRIAL AREA

■■■■■ PRESERVATION ORDINANCES AND TECHNICAL AND FINANCIAL ASSISTANCE



**4. PREFERRED ALTERNATIVE
CALUMET UNIT
KEWEENAW**



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The additional park staff would also be able to provide a significant increase in technical assistance for interpretive needs of cooperating sites and partners.

FINANCIAL AND TECHNICAL ASSISTANCE

Local Preservation Ordinances

The local governments , through the designation of local historic districts and preservation ordinances, would play a major role in protecting the park's significant resources. The National Park Service would assist in this process in a number of ways, including acquisition of significant properties in the park.

Initially, additional park staffing would allow for continuing the ongoing baseline inventory and documentation of historical resources in Calumet. This effort would be expanded to include the Quincy unit. (Such documentation is required before the local historic districts and preservation ordinances can be established.) Also, the National Park Service would prepare a cultural landscape report, which would identify which buildings, sites, and other landscape elements contribute and which do not contribute to the park's significance (see the "Future Plans and Studies Needed" chapter).

As the staff and funds increase with implementation of alternative 4, the National Park Service would assist the local governments in defining boundaries for locally designated historic districts and drafting preservation ordinances for adoption by local governments. The National Park Service would continue to assist by helping provide design review of preservation proposals submitted to the commission.

Other Assistance Efforts

The cultural landscape report, the current historic resource study effort, and the land

protection plan would help provide information for setting priorities for acquisition and other kinds of technical and financial assistance.

Initially, technical assistance for historic preservation would increase over current levels because of being able to hire additional NPS professional and clerical staff. Further, additional NPS staff would increase the park's ability to provide professional assistance through education and coordination to partners and cooperating sites in their efforts to organize and implement their park-related projects. Interpretation assistance could come in the form of helping partners and cooperating sites prepare interpretive brochures and displays and teaching interpretive skills.

The park would be prepared to distribute up to \$400,000 annually (as available) in preservation grants as allowed by park legislation. Once the grant program reached a sufficient level (about \$200,000 to \$250,000) the National Park Service would assist the community in establishing a local historic district commission that would administer the ordinances. At the full implementation level, the park would have an established and active historic preservation grant program.

To fully implement this alternative, the local governments would have shown their commitment to the partnership by providing or ensuring

- strict ordinances and permitting procedures on buildings and grounds within significant areas of the park
- less restrictive ordinances concerning certain significant housing areas within the park boundaries
- voluntary compliance to published housing guidelines in less sensitive areas of the park
- encouragement for local governments, with the assistance of federal, state, and/or local funds, to provide historic preservation grants to help achieve these goals

NPS ACQUISITION OF PROPERTIES

At least one property in each unit would be leased or acquired for administrative and visitor use facilities. In addition, under this alternative other significant properties within the park units might be acquired or otherwise protected, some of which might be made available for leaseback to current owners/tenants or new tenants for continuing existing uses or establishing new uses, if compatible.

Other creative approaches might be feasible for protecting historic structures. For example, it is believed that a nonprofit organization could secure the necessary funds from private banking interests to rehabilitate historic structures providing that organization had a long-term lease from another entity for subsequent use of those buildings for public purposes.

DEVELOPMENT AND USE OF ACQUIRED STRUCTURES

Until such time as the National Park Service begins its acquisition program for the Calumet and Quincy units, it would be premature to propose any detailed development and use proposals for the various buildings and properties.

The Calumet Township Strategic Plan Committee, with assistance from U.P. Engineers and Architects, Inc., prepared the *Calumet Concept Development Plan* (1995) that proposes specific uses for many of the buildings in the park's Calumet unit. The Quincy Mine Hoist Association has a similar long-range plan for its holdings in the Quincy unit. The Quincy Mine Hoist Association's plan is included in appendix G; the Calumet plan is included in appendix H.

As in alternative 2, the National Park Service would work with the Calumet Township Strategic Plan Committee, the Quincy Mine Hoist Association, as well as other current or prospective owners and developers to implement the proposals in these two plans as long as

they meet the over all goals and objectives of the park. In addition, however, As in alternative 3, because alternative 4 proposes that the National Park Service acquire or otherwise take a proactive role in the preservation of significant resources in both units, the National Park Service would also look to the Quincy and Calumet plans for preliminary guidance as it determines treatment and use of any such properties that could ultimately come under its control.

As noted in alternative 2, it must be understood that NPS policies and guidelines call for certain types of information as the basis for final decisions about rehabilitation and restoration proposals to ensure the protection of historic buildings and landscapes. As a result, while these plans are included as interim recommendations for treatment and use of buildings in the Calumet and Quincy units, preservation needs could dictate changes to these proposals later when more information becomes available.

It must also be understood that, given the uncertainties of the federal budget as it relates to the park, some time could pass between the approval of this plan and the implementation of proposals in this alternative. Therefore, the National Park Service reserves the right to reevaluate the recommendations in the Calumet and Quincy plans at the time that it undertakes a land acquisition program and subsequent advance planning for development. The park would make modifications as appropriate to fit the then current needs, policies, and focus of the National Park Service.

PARK ADMINISTRATION AND OPERATION

As described in alternative 3, a building (or buildings) in the Quincy unit would house administrative offices as well as a destination visitor facility. A suitable building (or buildings) in the Calumet unit would function as the administrative headquarters for the park

superintendent and staff and also provide basic visitor orientation.

Because acquisitions could occur under this alternative, the National Park Service might need at least one maintenance facility to house maintenance equipment, shops, bulk storage, offices, and worker showers and lockers, as described in alternative 3. An option would be to explore contracting out maintenance services.

BOUNDARY ADJUSTMENTS

The current boundaries of the park units were set as initial boundaries in the establishing legislation. With more information about the park, these boundaries were reexamined to see if adjustments needed to be made.

In the Calumet unit, the current east boundary, mostly defined by Rockland Street, arbitrarily cuts through company housing. Three blocks to the east southeast of Rockland Street is the historic and current boundary between Calumet Township (C & H Mining Company land) and the Village of Laurium (Laurium Mining Company land). This would be the unit's new boundary.

Also, in the northeast corner of the Calumet unit is a four-block tract known as the Albion Location. This tract contains excellent examples of "trunk" and front-gable housing built by the C & H Mining Company, and it is the only tract of historic housing left out of the park boundaries in that corner of the unit. Including this tract would give the park representative examples of these types of housing in an integrated setting.

About a dozen historic houses were left out of the Calumet unit because the boundary arbitrarily follows the center of Pine Street rather than the north (rear) property lines. Moving the boundary to conform with the rear property lines would eliminate the question of why significant historic housing on one side of a street was omitted from the park and simplify future park management.

The small Swedetown tract contains some of the earliest Finnish miners' cabins. This relatively intact area provides an example of the typical mining housing that is not found elsewhere in the park. The boundary would be changed to include this tract, but not any of the Swedetown ski trails or other recreational trails.

These additional 248 acres of boundary expansions listed would expand the Calumet unit from 752 acres to 1,000 acres.

IMPLEMENTATION, STAFFING, AND COSTS

NOTE: The following estimates are of the park operating budget needs and the money needed to provide preservation assistance grants and technical assistance and to assist with interpretive activities through cooperative agreements. These figures do not include money for the hazardous substances investigation; possible acquisition costs; or rehabilitation, stabilization, or restoration of properties anticipated to occur in the implementation of this alternative. Estimates of those costs will have to be made closer to the actual actions when more information is available.

Implementation

As with alternatives 2 and 3, this alternative could not be implemented overnight and would have to be phased in gradually.

Staffing

The superintendent is responsible for determining the staffing levels necessary for meeting park goals. The intent is to provide the best resource protection and visitor services within budgetary constraints.

Although alternative 4 is basically a combination of alternatives 2 and 3, the staffing needs could be less in alternative 4 because it could

THE ALTERNATIVES, INCLUDING THE PROPOSED ACTION

require substantially less NPS fee-simple land acquisition and the resulting operation and maintenance costs. As with alternatives 2 and 3, the staff increases would have to be increased in phases to meet the particular needs of the plan's implementation.

Costs

The estimated annual operating costs (see note above) for full implementation of this alternative would be \$1.9 million.

TABLE 1: SUMMARY COMPARISON OF ALTERNATIVES

Common to All Alternatives	<p>Commission Operating Authority — The National Park Service would work with state congressional delegation to amend the park's legislation and allow the park's commission to implement its operating authorities. Until this amendment is passed by Congress, the National Park Service would assume the operating authorities of the commission that were necessary to ensure orderly operation of the park and its programs.</p> <p>Cooperating Sites / Cooperative Agreements — A</p> <p>limited number of cooperating sites would be established, each representing a unique story that integrates into the park story. Such sites would be eligible for funding or assistance from the commission and the partnership and for consultative assistance from the National Park Service. The National Park Service would have no liability for the sites.</p> <p>The National Park Service could enter into cooperative agreements with owners of nationally significant historic properties within park boundaries. Such sites/resources would be eligible for specific financial and technical assistance regardless of whether they were designated cooperating sites.</p>	<p>Acquisition of Property — The National Park Service would use various methods of leasing, acquiring, or otherwise protecting properties in the park, primarily within the industrial core areas of the Calumet and Quincy units. The National Park Service would work with the Michigan congressional delegation to remove the language in the park's establishing legislation that prohibits NPS acquisition of any property in the park that is contaminated by hazardous materials. Until a land protection plan is developed, this plan sets forth criteria to be used for determining the appropriateness of a property for acquisition or other proactive protection (see "Acquisition of Property" section).</p>	<p>Relationship to Isle Royale National Park</p> <p>— Although the park would remain a separate unit of the national park system, Isle Royale personnel would provide comprehensive administrative services to the park for cost-effectiveness and efficiency.</p> <p>Establishment of Local Historic Districts and Ordinances — The establishment of local historic districts and ordinances would be pursued for both park units.</p>	<p>Carrying Capacity — A proper carrying capacity for the park and strategies for not exceeding this capacity would be identified in future documents.</p>
	<p>Technical Assistance — National Park Service would provide property owners within the boundary and cooperating sites with technical assistance for historic preservation and interpretation.</p>	<p>Management Zoning — Because Keweenaw is a historical park, the major management zone would be a historic zone, with other subzones, as needed. However, actual management zone designations are premature before NPS acquisition or active park management.</p>		

Topic	Alternative 1, Continuation of Existing Circumstances	Alternative 2, Community Assistance Alternative	Alternative 3, Traditional Park in Core Industrial Areas	Alternative 4, Proposed Action
Concept	Federal financial support for park would continue to be minimal. National Park Service would be primarily in a caretaker mode of operation.	In partnership with the National Park Service and others, the community would be at the forefront of implementing preservation actions and interpretive programs at sites throughout the park. The National Park Service's role would be to remain primarily in the background, in a support role to help make community actions a success. NPS support actions, undertaken in partnership with local governments, businesses, nonprofit groups, and other property owners, would range from assistance with preservation ordinances and grants and resource preservation to assistance in establishing and enhancing educational and interpretive programs throughout the park and at cooperating sites.	This alternative proposes a much more traditional park experience in the core industrial areas of each park unit. As funding and staffing levels allowed, the National Park Service would invest substantially in each of the core industrial areas by acquiring significant properties, conducting resource preservation, and adaptively using the structures. The National Park Service would install interpretive media and provide interpretive staff at key sites, establish partnerships, and provide technical and financial assistance to further core industrial area preservation. Community efforts outside the park's core industrial areas would determine the level of preservation and type of visitor experience offered, although the park's interpretive services would likely overlap into these areas.	This alternative is a combination of the technical and financial assistance component in alternative 2 and a refinement of the traditional park idea in alternative 3. The goal would be to create a dynamic traditional national park area where the National Park Service has a strong presence and, through community assistance, is a contributing member of an active partnership of local government and community groups. In the long term, this alternative would provide the broadest level of resource protection and visitor services.
Visitor Experience and Interpretation	Visitors would continue to rely on interpretive services at cooperating sites; Calumet would remain a self-discovery area, although some information would be available. Seasonal interpreter would be available if funds permitted.	Initially, visitors would depend on information at other cooperating sites and cooperating sites in the park such as the Quincy Mine Hoist and Underground Mine and CopperTown USA. Gradually, financial and technical assistance for community preservation and interpretation efforts and some direct NPS interpretive services would offer visitors a more in-depth experience. At full implementation, there would be an NPS visitor facility in both units.	At first, visitors would be somewhat dependent on the opportunities at the cooperating sites. Eventually, visitors would experience a very traditional NPS park visit in the core industrial areas of each unit. The cooperating sites would continue to complement NPS services. A destination visitor orientation facility would be provided in the Quincy unit. Basic visitor services would be provided in the Calumet unit. Community efforts outside the core industrial areas would be a key factor in determining what visitors would experience there.	At first visitors would be somewhat dependent on the opportunities at the cooperating sites. Eventually, visitors would experience a very traditional park visit as more resources were preserved and interpreted. Uniformed staff would provide interpretation of many of the preserved structures and walking tours of the areas. Concerned community efforts and significant federal assistance toward preservation efforts throughout the park would substantially improve the appearance and protection of park resources, thereby enhancing opportunities for visitors to learn about the park and region.

Topic	Alternative 1, Continuation of Existing Circumstances	Alternative 2, Community Assistance Alternative	Alternative 3, Traditional Park in Core Industrial Areas	Alternative 4, Proposed Action
Financial and Technical Assistance	<p>A park priority would be to provide whatever technical assistance staff and budget allow to help facilitate and coordinate the community's process of establishing local historic districts and preservation ordinances.</p> <p>NPS funds for grant program would be limited or nonexistent.</p>	<p>Primary responsibilities for protecting the park's significant resources would be vested in the local governments through the designation and establishment of local historic districts and preservation ordinances. NPS assistance in this effort would be a resource inventory and documentation, including a cultural landscape report, a definition of district boundaries, draft preservation ordinances, and help in reviewing preservation proposals. Additional NPS staff would increase the park's ability to provide professional assistance to partners and cooperating sites through education and coordination.</p> <p>The park would be prepared to distribute preservation grants and, at full implementation, would have an active grants program. With sufficient funding, an administrator would be hired to administer the grant program.</p>	<p>NPS assistance to the community to establish and administer preservation ordinances would be primarily limited to the core industrial areas of each unit.</p> <p>At full implementation, the park would have an active technical and financial assistance program, as described in alternative 2, but the primary focus would be on the core industrial areas.</p>	<p>Same as alternative 2, except that there would be a local historic district commission to administer the ordinances and more grant money would be available.</p>
NPS Property Acquisition	No acquisition.		<p>At least one property in each unit would be leased or acquired for administrative use and visitor services. Park headquarters would be in the Calumet unit.</p>	<p>At least one property in each unit would be acquired for administrative use and visitor services. Also, other significant properties in the core industrial areas of each unit would be acquired.</p>
Development and Use of Acquired Structures	Not applicable.		<p>Only limited NPS acquisition is proposed, and it is premature to propose detailed development and use proposals. The National Park Service would work with others to implement the proposals in the Calumet and Quincy plans that are appropriate to the overall goals and objectives of the park.</p>	<p>Similar to alternatives 2 and 3, encompassing both park units and not just the core industrial areas.</p>

Topic	Alternative 1, Continuation of Existing Circumstances	Alternative 2, Community Assistance Alternative	Alternative 3, Traditional Park in Core Industrial Areas	Alternative 4, Proposed Action
Park Operations and Administration	NPS headquarters would be in leased space in Calumet.	A building (or buildings) in the Quincy unit would house administrative offices as well as a destination visitor facility. A suitable building (or buildings) in the Calumet unit would function as the administrative headquarters for the park superintendent and staff and also provide basic visitor orientation. Maintenance would be contracted out.	Same as alternative 2, except that at least one maintenance facility might be required as more acquisitions were made. An option to contract out maintenance work would be considered.	Same as alternative 3.
Boundary Adjustment	None.	None.	None.	There would be boundary adjustments of 248 acres in the Calumet Unit — moving the east boundary (defined by Rockland Street) about three blocks west; including the Albion Location; following the rear (not center) property lines along Pine Street to include about a dozen historic houses; and including Swedetown.
Implementation, Staffing, and Cost Estimates (includes only operating, staffing, grant, and assistance costs)	No implementation plan. Management priorities would be used to guide NPS activities.	With a phased approach, staffing for this alternative would grow, initially focusing in the areas of clerical support, preservation, planning, and interpretation, and later adding history and cultural landscape preservation.	Phased implementation. With potentially more NPS ownership than alternatives 1, 2 and 4, more maintenance and interpretation services would be required. Initial staffing needs would include clerical support and expertise in history, historical architecture, interpretation, and planning; later needed expertise would be in the areas of resource protection and maintenance.	Phased implementation. Staffing needs would be less than in alternative 3 because less NPS ownership of properties is proposed.
	Annual operating budget of about \$216,000 would continue.	Estimated annual operating costs for full implementation would be about \$1.1 million annually.	Estimated annual operating costs for full implementation would be about \$2.5 million annually.	Estimated annual operating costs for full implementation would be about \$1.9 million annually.

TABLE 2: SUMMARY OF NPS PRESERVATION TOOLS AVAILABLE

PRESERVATION TOOLS AVAILABLE TO NATIONAL PARK SERVICE	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4 — PROPOSED
NPS ACQUISITION OF FEE OR LESS-THAN-FEE PROPERTY	none	minimal	moderate and selected, but in core industrial area only; NPS fee acquisition is critical to success of alternative	moderate and selected, but anywhere within park boundaries; NPS fee acquisition would be last resort
TECHNICAL ASSISTANCE	minimal	extensive	primarily in industrial core areas	more than alternative 2; also encompassing entire park boundaries
FINANCIAL ASSISTANCE	minimal to nonexistent	extensive	primarily in industrial core areas	more than alternative 2; also encompassing entire park boundaries
COOPERATIVE AGREEMENTS	minimal, if at all	numerous	primarily in industrial core areas	more than in alternative 2; also encompassing entire park boundaries
HISTORIC DISTRICTS/ PRESERVATION ORDINANCES	yes, but minimal NPS assistance	yes, strong NPS technical and financial assistance encompassing the entire park boundary	yes, NPS technical and financial assistance in core industrial areas only	same as alternative 2

A PARTNERSHIP FOR THE PARK AND PENINSULA — THE FOUNDATION

As the planning for Keweenaw National Historical Park has evolved, planners saw in the park a unique opportunity to demonstrate that there could be a viable, dynamic, exciting, educational, useful, and worthwhile unit of the national park system without a major investment of federal dollars for capital expenditures or continuing long-term operations and maintenance costs — a prototype for the 21st century. Such a scenario, however, would depend on crafting the partnerships described below. Regardless of which alternative is chosen, the vision for the park will be fulfilled only as federal and state support materializes and local partnerships mature and function.

THE BASIS FOR THE PARTNERSHIP — THE LEGISLATED RESPONSIBILITIES OF THE ADVISORY COMMISSION

The legislation carefully divided responsibilities for the park's successful development, operation, and management between the National Park Service and the Keweenaw National Historical Park Advisory Commission. In the legislation, the commission's primary duties are as follows:

1. Advise the secretary [of the Department of the Interior] in the preparation and implementation of the general management plan.
2. Advise the secretary on the development of and priorities for implementing standards and criteria by which the [National Park Service] will distribute its technical and financial assistance to owners of nonfederal properties in the park.
3. Advise the secretary on the development of rules governing the disbursal of funds for the development of nonfederal properties.
4. Advise the secretary with respect to the selection of sites for interpretation and

preservation by means of cooperative agreements.

5. Assist the secretary in developing policies and programs for the conservation and protection of scenic, historical, cultural, natural, and technological values of the park.
 6. Assist the secretary in coordinating with local governments and the state in the implementation of the general management plan and furthering the mission of the park.
 7. Be authorized to carry out historical, educational, or cultural programs that encourage or enhance appreciation of the historic resources in the park, surrounding areas, and on the Keweenaw Peninsula.
 8. Be authorized to seek, accept, and dispose of gifts, bequests, or donations of money, personal property, or services received from any sources consistent with the purposes of the park.
- In addition, the commission may
9. Acquire real property, or interests in real property to further the purposes of the legislation. Any real property, or interests therein, acquired by the commission must be convey to the National Park Service or other appropriate public agency as soon as possible after acquisition.
 10. Appoint and fix the pay of such personnel the commission deems desirable.

The legislative history of the park makes it clear that Congress had a much wider vision for the Keweenaw Peninsula than just those activities that would occur within the boundaries of the park, which would be the primary responsibility of the National Park Service. Congress' intent was to establish a "voice" for the significant resources and stories of the Keweenaw, especially those outside the park boundaries.

Congress has vested the commission with that voice.

Of these 10 specific advisory and operating authorities, numbers 7–10 are the most important because they give the commission the authority to carry out historical, educational, and cultural programs throughout the peninsula, and to disburse funds and acquire, and subsequently dispose of, property both within and outside the park boundaries. It is these authorities, along with the other authorities enumerated above, that give the commission special standing within a partnership (see concept below) to support the goals of the park and to reach out beyond the park's boundaries to the wider Keweenaw community.

THE CONCEPT OF PARTNERSHIP

Keweenaw National Historical Park is the culmination of a community effort to preserve the vestiges of a mining culture and tell the stories of that culture. Since the formal establishment of the park in 1992, many individuals, as well as a number of local public and private entities, agencies, and organizations, have formed, or proposed to form, partnerships with the National Park Service to plan, develop, and promote the park. In fact, under sections 7, 8, and 9 of the park's establishing legislation, authority is given to the National Park Service and the park's advisory commission to enter into a broad range of cooperative relationships with public and private entities.

Keweenaw is the epitome of a partnership park. In an age of drastically reduced federal funding, it is no longer feasible to expect that large sums of federal money will be made available for the development of this park. Consequently, the establishment of a strong, structured partnership among the public and private sectors, the National Park Service, and the commission is even more critical to the success of Keweenaw National Historical Park. To fulfill Congress' intent, the community must be empowered to

actively help preserve and protect the park it worked so hard to create.

The partnership described below is a two-phased approach. Phase I describes a partnership concept that will be put in place pending the Congress granting additional legislative authority for the commission to implement its operating authorities (see "Actions Common to All Alternatives" chapter). Once those authorities are again granted to the commission, the partnership will evolve into phase II. The primary difference between the two phases lies in the role of the commission within the partnership. Phase I sees the commission (with its limited advisory authorities) functioning as an equal partner with the rest of the membership. Phase II sees the full operating commission as "first among equals" in the partnership. As such, it will become the permanent chair of the partnership. As described below, however, its role will be primarily that of facilitator and clearinghouse, bringing together the myriad other members of the partnership under its umbrella vision for the entire Keweenaw community.

An Interim Partnership for the Park (Board of Partners)

The interim partnership envisioned for the park features a consensual approach that would be implemented by a board of partners. This board would be comprised of a representative from each of the cooperating sites and from agencies and organizations that choose to join the umbrella partnership. Roles of the partners within the larger structure would be defined by the partners through consultation and mutual consent. The chair of the board would be selected by majority decision of the partners and would serve a specified period not to exceed one year. The role of chair would be rotated over time throughout the entire partnership. The partnership board would discuss issues of common interest, devise strategies to resolve problems, and coordinate activities among the various partners.

INTERIM PARTNERSHIP CONCEPT

Keweenaw National Historical Park General Management Plan



Within the framework of this partnership, each entity would maintain its organizational and operational integrity. The partners would not dictate to each other but share their expertise in a true partnering approach. Good faith, reasonable recommendations regarding NPS management and operations in the park that were made at these meetings would not be binding on the National Park Service or the other partners. In the spirit of true partnering, however, the National Park Service would consider implementing the partners' recommendations.

For those partners who manage and operate interpretive facilities that serve visitors, the partnership could assist in resolving technical and procedural questions concerning interpretation and historic preservation and coordination of their respective activities. Further, the National Park Service would strive to bring these activities up to the prevailing preservation, interpretive, and operational standards of the National Park Service, on a contractual basis. To implement this contractual approach, mainly through cooperative agreements, the National Park Service would have to provide Keweenaw National Historical Park with sufficient funding and personnel to accomplish the park's enhanced mission within the partnership.

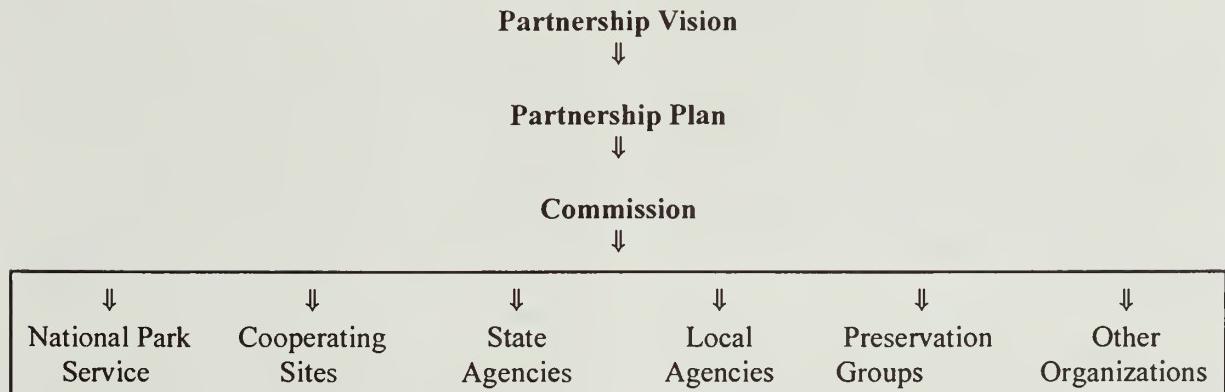
This board would not supersede, replace, or otherwise subordinate the mandated duties of the National Park Service or the Keweenaw National Historical Park Advisory Commission as set forth in the park's establishing legislation.

New partners could be added to the partnership over time based on the consensual agreement of all parties. The initial grouping of partners could consist of the National Park Service, representatives of the various cooperating sites, the chair of the park's advisory commission, the Village of Calumet, Calumet and Franklin Townships, the cities of Houghton and Hancock, Osceola Township, the state of Michigan, Houghton and Keweenaw Counties, Michigan Technological University, the Village of Laurium, planning agencies, quasi-government agencies including regional planning agencies, chambers of commerce, historic preservation committees, and downtown development agencies. Mention of these specific entities would not preclude the addition of any organization that plays a role in the success of Keweenaw National Historical Park. An obvious key criterion for future membership in the partnership should stress the candidate group's relationship to the spirit of the park's establishing legislation.

The Permanent Partnership for the Park and Peninsula

The legislation that established Keweenaw National Historical Park and its advisory commission has given the commission broad authorities that transcend the boundaries of the park. As such, the commission will serve as the catalyst to bring the myriad public and private agencies on the Keweenaw Peninsula together. This will be the commission's primary role in the partnership — to be the clearinghouse through which the area's diverse interests can

PERMANENT PARTNERSHIP CONCEPT



gather and collectively work to achieve a common vision and common goals and objectives.

Once its full operating authorities are enacted, the commission, working with the other partners, should undertake the preparation of a comprehensive management plan that would guide its activities throughout the peninsula. The plan would establish an overall vision for the peninsula, set forth specific goals and objectives for the commission and the partnership, and outline the method to implement the plan. Although it is not within the purview of the National Park Service to prepare such a plan for the commission, some suggested goals and objectives, as well as other thoughts on this matter can be found in appendix I.

With the commission as anchor, the people of the Keweenaw can preserve and interpret the area's mining heritage and share its story with the rest of the world. As all partners work toward the goals, opportunities for area residents to participate in the growth and diversification of the region would be realized. This growth and diversification would be balanced by the conservation of its significant cultural, natural, and recreational resources, its rich and diverse cultural heritage, and its community values.

To establish a permanent partnership, the commission and its staff would work with many different agencies and entities — federal, state, and local governmental agencies, public/private not-for-profit organizations, special interest groups, the business community, and community organizations — to ensure that these partners support the vision, goals, and objectives for the Keweenaw as defined above. Subsequently, the partnership would define a carefully crafted role for each partner; these roles should incorporate their respective portfolios of laws, regulations, expertise, funding, and other mandates to assist in implementing the goals. The partnership would be carefully designed to use the strengths of each partner rather than create another level of bureaucracy.

HOW THE PARTNERSHIP WOULD FUNCTION

Once the partnership has been established, the commission's primary role would be that of facilitator/coordinator of the partnership. The commission would contribute funding and an areawide vision. The partnership would develop a joint, multiyear planning and development program to accomplish the overall vision and goals and stimulate and assist each other in contributing to the benefit of the Keweenaw through their own special areas of expertise.

The National Park Service, as one of the partners, would continue to administer Keweenaw National Historical Park, provide basic interpretive skills and site operations training to state and local agencies, implement mining heritage educational programs within the park, and advocate the extension of the mining heritage themes beyond the park boundaries. In addition, the National Park Service would continue to provide administrative and technical research, planning, design, and construction support as requested.

As a full partner the state of Michigan would be expected to actively participate in the partnership and bring to the table its complete portfolio of laws, regulations, funding, expertise, etc., for the benefit and use of the overall success of the park

As a result, there are a number of roles that the state could serve in the partnership. For example it could also provide resource management and interpretative technical assistance to nonstate-owned cooperating sites. It could also establish its own preservation and technical assistance fund to augment NPS and commission efforts and provide additional funding for preservation and other technical assistance grants.

The state could highlight its resource management and interpretive services at state-owned cooperating sites that are part of the park story. The state could also expand its resource management and interpretive efforts by considering the acquisition and management of a significant resource (s) related to the park story, e.g., Quincy, the Quincy smelter, Cliff Mine, Painesdale, etc. Such acquisition and management could be done under existing authorities or use the park as a pilot study to establish a state heritage park program similar to Pennsylvania or Massachusetts.

Further, the state could build and jointly operate with the National Park Service and other regional entities a regional visitor orientation center. It could also provide staff to assist in overall park administrative and operational

functions, e.g., interpretation, resource management, and historic district ordinance management.

Two key roles in making the partnership a success, however, rest with local government officials and the private sector. Elected officials would have to support the vision with verbal endorsement and, more importantly, with specific actions. For example, revised ordinances related to proper zoning and historic preservation covenants might be required. Local enforcement of these covenants would be required. Major efforts would be necessary to upgrade existing recreational and cultural opportunities and facilities. Local redevelopment agencies could set the example of seeking methods to rehabilitate and adaptively use existing residential and commercial buildings. When new construction is required, local officials should ensure its compatibility with existing design, height, and setbacks.

The private sector — small businesses and large corporations — must also be encouraged and assisted by the partnership to have a role in ensuring the success of the effort. Overnight accommodations, restaurants, gift shops, parking, and other infrastructure needs must be available to visitors. The provision of such services, however, is a major undertaking that would not be successful unless the private sector is in full support of the vision and goals of the partnership. Oftentimes, the large corporations control the resources and facilities that need to be preserved and interpreted as part of the effort, and without their full support the effort would not be successful.

In addition to ensuring that local officials assist in achieving the goals, the partnership would encourage and assist residents of the peninsula to do their part. Owners of historically significant residential, commercial, and religious structures should ensure that they are properly maintained so as not to compromise their historical, architectural, or cultural significance. Those who own property within significant residential or commercial historic districts

should have these districts recognized and protected through historic district zoning and preservation ordinances. Business owners should undertake building facade restoration projects. New businesses coming to the peninsula should locate in existing commercial areas rather than construct new facilities outside the core commercial areas. Church congregations should restore their historic buildings and provide opportunities for visitors to see their attractive facilities at times other than worship services.

Both the public and private sectors throughout the peninsula should ensure that the community provides the experiences, services, and amenities necessary to encourage visitors and residents to recreate, shop, work, and live in the area and discover and appreciate its rich cultural and mining heritage.

AN ADJUNCT, NOT-FOR-PROFIT CORPORATION

In addition to the partnership (either phase I or II) described above, the partnership should also consider the establishment of an adjunct private, not-for-profit corporation, under the provision of 501(3)(c) tax status to assist the partnership primarily in the areas of fund-raising, as well as other selected programs and activities. This could occur in at least two ways: The partnership could (1) set up the not-for-profit corporation under its auspices or (2) request that an existing area entity with not-for-profit tax status fulfill this responsibility.

The establishment of such a not-for-profit corporation would better ensure the partnership that its projects, programs, and activities undertaken to preserve and tell the stories of copper have long-term sustainability. For example, this not-for-profit entity could be empowered to seek funding from all sources, initiate other revenue-generating activities, and even establish an endowment fund to assist in implementing the partnership's activities. It could also acquire and hold significant resources that were threatened with loss until such time as new owners willing to protect and preserve the resource could be located.

The corporation could also be responsible for overseeing other project activities, such as sales and publications programs. If requested, it could also assist various partners in fund-raising for specific projects, programs, and activities, such as research, interpretive efforts, and publications. Such a corporation would help ensure a steady source of funding beyond the time that major public expenditures are reduced.

This proposed adjunct, not-for-profit corporation concept would work equally effectively under either the interim or permanent partnership proposed for Keweenaw National Historical Park. Therefore, it should be established as quickly as possible during the interim phase of the partnership rather than waiting for the commission to obtain its operating authorities and the partnership moving into phase II, the permanent partnership.

FUTURE PLANS AND STUDIES NEEDED

The development of a general management plan is the first planning step for Keweenaw National Historical Park; it sets the overall vision and direction for the park and identifies future planning needs and a sequencing strategy for those needs.

The following are studies that will likely be needed to fully implement the approved management plan for the park. The list below is not intended to show priority order

- **Historic structures reports** — These reports would include documentation of existing conditions and preparation of condition assessment reports. These reports are required before any rehabilitation or restoration can proceed on historic structures.
- **A historic resource study for the Calumet and Quincy areas** — This study is underway, as is the building-by-building survey that is needed to establish local historic districts.
- **Development concept plan(s)** — This plan(s) would provide more detailed planning for park access, circulation, and facilities necessary for visitor use (e.g., a visitor center) and park management (e.g., a maintenance facility).
- **A schematic design document** — This document, which usually follows a development concept plan, would deal with design issues related to the approved development; this document is the transition from planning to design. Other design documents would include a **comprehensive design and construction documents**, which ultimately lead to construction.
- **A cultural resources base map** — Especially if based in GIS data, this map would provide a format to depict the locations of known cultural resources (structures, cultural landscapes, and archeological and ethnographic resources) and graphically show their interrelationships.
- **An archeological overview and assessment** — This document would describe and assess known and potential park archeological resources, summarize and evaluate the extent of archeological data currently available, and outline the need for more work to fill gaps in existing data. This assessment would help identify areas where archeological work is needed to supplement or verify the existing historical documentation on mining technologies and social and cultural history as well as any potential that prehistoric sites exist in the park.
- **A cultural landscapes inventory** — This is a nationwide NPS automated inventory for recording information about locations, historical development, character-defining features, and management of park cultural landscapes.
- **A cultural landscape report** — This is the primary guide to treatment and use of a cultural landscape. The report documents and evaluates landscape evolution, including features, materials, and qualities that make a landscape culturally significant, and it makes treatment recommendations. It could be an interdisciplinary study that would identify both ethnographic and technological values of the park's landscapes.
- **A rapid ethnographic assessment procedure** — This procedure would quickly identify resource-related concerns of park neighbors and traditional users of park resources.
- **An ethnographic overview and assessment** — This would be a study of types, uses, and users of park ethnographic resources. This assessment would evaluate existing data on those resources and make recommendations

for further study to fill gaps in available information. The park touches the social, cultural, and economic history of a wide variety of ethnic groups, including Native Americans.

These two studies, the ethnographic assessment and the overview and assessment, would help identify what ethnic groups value and the things that concern them about park resources.

- **A resource management plan** — This plan would strive to integrate cultural and natural resource management actions in the park; it would provide a specific plan of action that would include an evaluation of resources and major threats to them, a summary of issues and strategies the park will use to address them, a list of funded actions and unfunded needs, and individual project statements
- **A land protection plan** — This plan would help guide the park's land acquisition program; it would be simple, concise, and prepared with public participation. This plan would identify alternative land protection methods for meeting the general management plan's visitor use, development, and resource protection goals; identifying the minimum interests necessary for those purposes; and establishing priorities for acquisition of land or interests in land.
- **A comprehensive interpretive plan** — This plan would form the overall vision and basis for decision making relating to interpretation in a park; it would provide a long-range and short-range view and deal with all media, including personal services. The interpretive plan for complex parks that share common themes with other parks or agencies should also include an **interpretive concept plan**. This plan would unify park and cooperating site planning efforts by identifying overall themes, objectives, and shared visitor experiences related to copper mining and by recommending appropriate sites to visit.

- **An oral history program** — This plan could capture a great deal of information about the lives of people who lived in the region at the turn of the century, although very few people from that era are still living.

- **corridor plan** — This study would be a cooperative, local, state, and federal government effort to address preservation, development, and transportation issues along the corridor between the two park units.

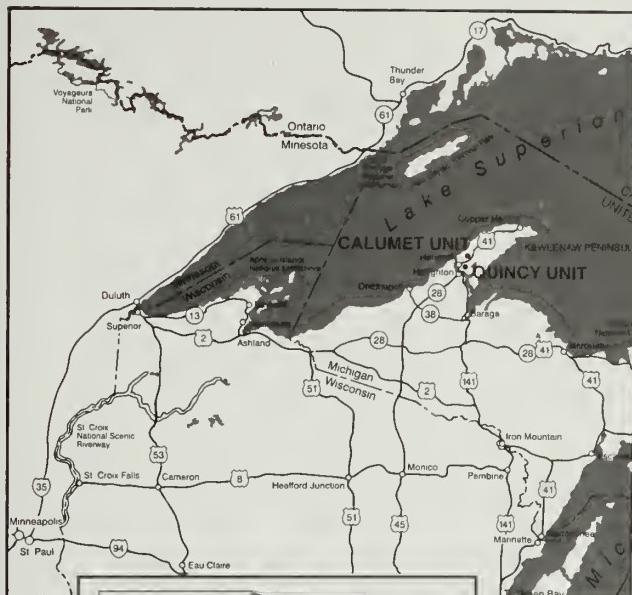
- **Level 1, 2, and 3 hazardous substances surveys** — These surveys would determine whether hazardous substances are present. These surveys are phased steps taken to determine the possible presence of hazardous substances on any tract of land proposed for acquisition. A level 1 survey is the completion of the "Contaminant Survey Checklist of Proposed Real Estate Acquisitions." Generally, this is a visual survey and no sampling occurs. The checklist must be performed within 1 year of acquisition. If there is no indication of a problem, no further surveys are needed. If a potential problem is identified, then a level 2 survey can be performed to verify the presence or absence of a contaminant.

A level 3 survey is done when there is a reasonable basis to assume that contaminants are present at the site and significant work is required to obtain an estimate of the costs of cleanup. To the extent feasible, this survey should occur within one year of acquisition. Level 2 and 3 surveys must be reviewed and acted on by the Department of the Interior's assistant secretary for Fish and Wildlife and Parks. (Reference: Memorandum, "Interim Guidance on Land Acquisition," August 23, 1989, Department of the Interior.)

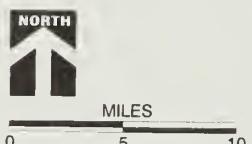
- **A boundary study** — This study would be funded and initiated following approval of this *General Management Plan* to reevaluate the boundaries at the Calumet and Quincy units to ensure that all significant resources related to those units are included within

park's the boundaries. This study would examine additional significant sites such as Cliff Mine, Painesdale National Historic District, and the Torch Lake area (reclamation plant, Tamarack City Stamp Mill, etc.) for possible inclusion in a boundary adjustment (see Areas of Future Study map). (See also the discussions of Cliff Mine, Painesdale National Historic District, and Torch Lake areas in the discussion of cultural resources in the "Affected Environment.")

The park could also provide important opportunities for academic research in ethnography, archeology, and social, cultural, technological, and economic history. Part of the vision for the park is the development of those opportunities through cooperation and partnerships with academic institutions and individual scholars. The park would have a coordinated program to promote research opportunities and needs and to realize the park's potential as a living laboratory.



- STATE FOREST
- STATE PARK
- NATIONAL FOREST
- INDIAN RESERVATION
- AREAS OF FUTURE STUDY



AREAS OF FUTURE STUDY KEEWEENAW



NATIONAL
HISTORICAL
PARK • MICHIGAN

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
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ALTERNATIVES CONSIDERED AND REJECTED

Major NPS Ownership Alternative

In September 1995 the National Park Service presented four alternatives for the future of Keweenaw National Historical Park for public comment. One of those alternatives, alternative 3, proposed that the National Park Service would acquire, in fee or less than fee, virtually every significant resource and property within the boundaries of the Quincy and Calumet units of the park. Under alternative 3 as proposed, all interpretation and other visitor services necessary in the park would be provided by the National Park Service. Thus, there would be little need to establish and sustain cooperative efforts and partnerships with local governments and other public and private entities, as was proposed in the other three alternatives.

Upon further evaluation, the National Park Service has determined that alternative 3 as proposed would not be desirable or feasible because (1) it defeats the entire purpose of a true partnership effort as envisioned in the park's enabling legislation and desired by the local supporters who lobbied so diligently for the park's establishment, and (2) because of the tremendous costs that would be involved for acquisition and implementation. In this day of fiscal conservancy at the federal level, such capital investments on the part of the federal government would not be likely.

Perhaps more importantly, the greater cost of implementing such an alternative would be the good will that would be lost should the National Park Service become the major landlord, particularly in the Calumet unit. Thus the National Park Service decided not to consider alternative 3, as proposed in September 1995 any further.

In addition, alternative 3 included a proposal to add four new units within the boundaries of the park. Unlike more traditional units of the national park system, however, placement inside the boundary does not equate with full NPS acquisition; rather, placement in the boundary triggers eligibility for technical assistance and preservation assistance grants. Included in those four units were:

about 2,000 acres of the Cliff Mine site (historic area) to be owned by the National Park Service

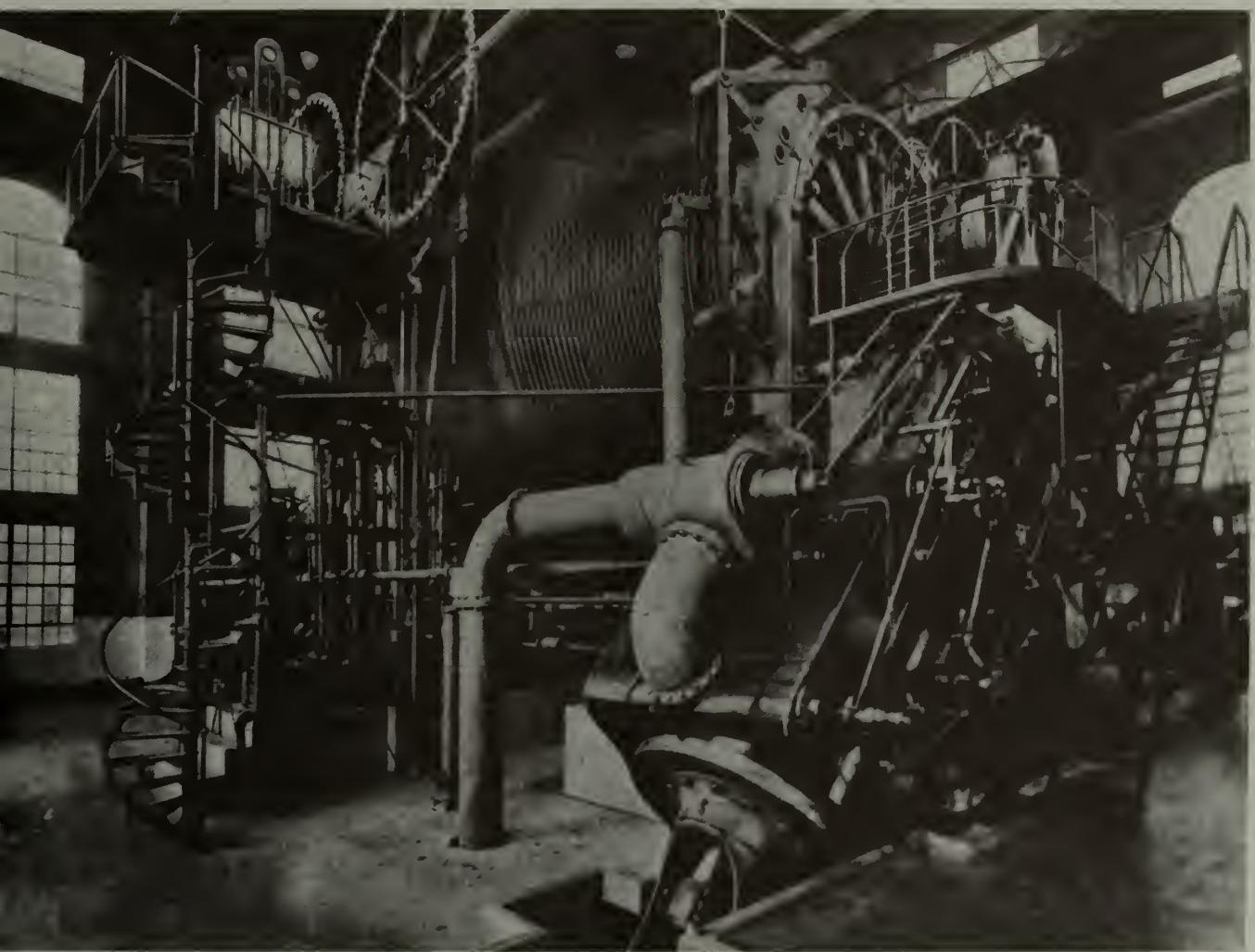
Mason, Tamarack City Stamp Mill, Torch Lake shoreline (this would involve limited NPS ownership and include primarily the stamp mill, reclamation plant area, and area surrounding Mason)

all of Laurium, with limited NPS ownership

the east Hancock Neighborhood and Downtown Quincy Street Historic Districts in Hancock

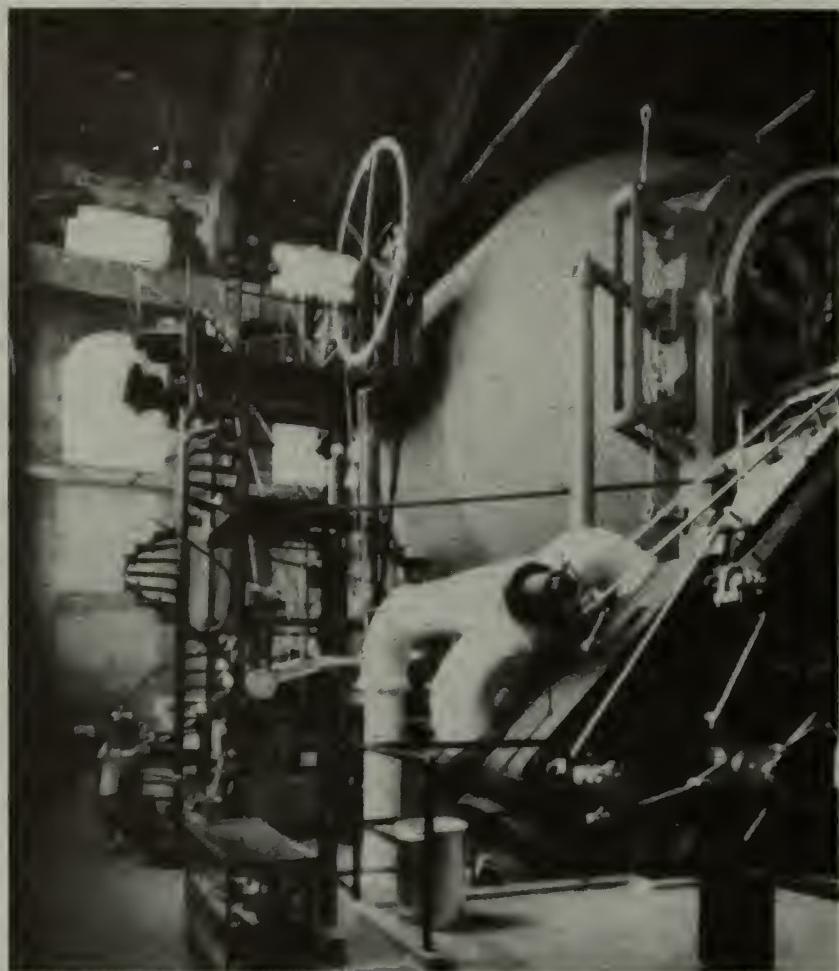
Of those four proposed additions to the park, two have been dropped from any further consideration at this time — the Village of Laurium and the historic districts in Hancock. A boundary study on the Cliff Mine, Painesdale, and Torch Lake areas would be undertaken under all alternatives in this *Draft General Management Plan* (see the "Future Plans and Studies Needed" chapter).

Affected Environment



The world's largest steam hoist, Quincy Mining Company, 1919.

Photo courtesy of Rexnord, from the Michigan Technological University Archives and Copper Country Historical Collections.



*Inside 1917 Quincy
hoist house, circa 1993.
From Keweenaw National
Historical Park collection.*



PHYSICAL SETTING AND DESCRIPTION

LOCATION

The Keweenaw Peninsula is about 100 miles long and about 50 miles wide at its base, narrowing to less than 10 miles wide at its tip. It extends north and east into Lake Superior from the western part of Michigan's Upper Peninsula. The outer 45 miles of the Keweenaw Peninsula is now an island, created in the 1860s when a lake-level canal was dug at the extreme northern end of Portage Lake. Keweenaw National Historical Park is basically in the center of the Keweenaw Peninsula.

ACCESS

Primary access to both park units is via U.S. Highway 41. The Quincy smelter is accessible from Michigan Route 26. The Houghton County airport is between the two units, just off U.S. 41.

PHYSIOGRAPHY

The combination of geology and glacial forces have determined the area's topographic relief, which ranges from steep rocky ridges and dissected glacial deposits to gently sloping lake plains and nearly level outwash plains. The elevation of the Calumet unit is relatively even throughout and averages nearly 1,200 feet. The Quincy unit has an elevation range from slightly over 1,100 feet in the north to about 600 feet at Portage Lake.

The Keweenaw's most prominent geologic feature is the central highland that rises above Lake Superior on the upthrust side of the Keweenaw fault. Ranging from 4 to 12 miles in width and extending from the southwest to the northeast, this highland forms the Copper Range. The highland represents a well-exposed example of

the 1.1 billion-year-old mid-continent rift system, which continues underneath Lake Superior and is exposed again at Isle Royale.

THE KEWEENAW PENINSULA

The Keweenaw Peninsula offers many interesting attractions. Lake Superior is a dominant feature both for scenic vistas and climatic influence. The northern hardwood forest, which offers a spectrum of colors in the fall; Brockway Mountain, which provides a dramatic 360° viewpoint; and mine shafts and mining sites all offer remarkable scenic and educational appeal for the visitor to the peninsula.

In fact, many sites on the Keweenaw Peninsula testify to the profits and hazards of copper mining, to the high failure rate of early entrepreneurs, and to the longevity of Keweenaw mining history. Evidence of work and life on the Keweenaw is vivid at mining locations and communities such as

- the Quincy Mining Company properties, including the Franklin and Pewabic mines, and the smelting works; the city of Hancock
- the C & H Mining Company industrial core, tracts of workers' housing, and the adjacent villages of Calumet and Laurium; the village of Copper City, and the Centennial Mine location
- the Cliff Mine site; the Champion Mine of the Copper Range Company and its company town, Painesdale; and the enclave of worker housing at Mason

Sites of mills and reclamation efforts along Torch Lake also reflect the growth and development of the mining industry on the Keweenaw.

CULTURAL RESOURCES AND RELATED AREAS

THE QUINCY UNIT

The Quincy unit of the park includes about 1,100 acres of land associated with the Quincy Mining Company, the longest producing mining operation in the Portage Lake district.

Established in 1846, four years after the opening up of the copper country by treaty to Euro-American settlement, the Quincy Mining Company began exploiting the extensive vein of amygdaloid copper, termed the Pewabic Lode, in the mid-1850s. Ranked first nationally in copper production for a period during the 1860s, the Quincy Mining Company earned the epithet "Old Reliable" for its long record of dividend payments to stockholders. Mining continued on the Quincy site for more than 100 years; the company's reclamation plant produced copper for yet another decade, until the late 1960s.

Remnants of the Quincy mining operation — the surface plant, smelter, administrative buildings, and worker housing — spread across a landscape that varies dramatically in topography, extending from the edge of Portage Lake up a steep, 500-foot rise to the peninsula's central ridge of copper-bearing rock. From the brow of Quincy Hill, above the city of Hancock, the site remains fairly flat as it sweeps to the northeast following the path of the copper range. Although the smelter is on the lakeshore, most of the buildings and structures related to the mine were built along the broad plateau beginning at the crest of Quincy Hill.

Following the course of the copper lode, the Old Calumet Road (now U.S. Highway 41) bisects the mine site. On the east side of this highway are the seven Quincy Mine shafts and surface works, including the Pewabic mines acquired in 1891. To the east of the mines are several discrete subdivisions of company housing, the earliest (Lower Pewabic) dating from 1899. On the west side of U.S. 41, facing the highway, are administrative and service buildings and managers' residences. Behind these to the west are a number of small neighborhoods of

company housing, including some buildings from as early as the 1860s.

Industrial Core Area

Except for the #2 shafthouse, which remains the most prominent structure on Quincy Hill, all of the shaft-rockhouses have been removed from the industrial grounds. The shaft openings, still evident, have been fenced off and covered with steel grating for safety. Some of the associated surface works have been torn down, but many significant and identifiable ruins stand.

Smokestacks from the boiler houses punctuate the hillside, while abandoned railroad trestles and narrow gravel lanes are evidence of past patterns of work and community life. Apple trees, planted decades ago in this heavily industrial setting, still line the unimproved roads. The once open spaces between the structures, stripped of vegetation as a working landscape, are now filled by trees and shrubs.

Visible at a distance of several miles from its position at the crest of Quincy Hill, the shaft-rockhouse (or, headframe) for Quincy's mine shaft #2 rises nearly 150 feet over a shaft that eventually reached more than 9,000 feet into the ground. This multilevel structure housed the system of cables, pulleys, and cars that transported ore and laborers in and out of the mine; the initial crushing of the ore was also completed here. The current steel-framed structure, covered with corrugated sheet metal siding, was constructed in 1907 and remained in operation until 1931. Next to the shafthouse are two steel stanchions that supported the cables that ran between the shafthouse and the #2 hoist house; the hoist house was built in 1918 to house the Nordberg hoist, the largest steam-powered mine hoist ever manufactured.

The building that contained the hoist for the #2 shaft before its replacement by the Nordberg, is north of the headframe. Constructed of coursed red sandstone in 1895, this structure, along with the shafthouse and 1918 hoist house, have been

the focus of preservation efforts by the Quincy Mine Hoist Association. The Nordberg hoisting engine has been restored to mint condition for public exhibition. The association has recently resheathed the #2 shaft-rockhouse and maintains the 1895 hoist house as a visitor center.

Several other significant brick and sandstone buildings remain, though now deteriorated, in the industrial core area north of the shaft/hoist house complex, including the blacksmith shop, machine shop, and roundhouse. South of the complex, close to the ridge of the hill, is another area containing substantial ruins of two shaft-houses. West of U.S. 41, near the shafthouse, is the 1917 bathhouse, a copper-corniced building of brick construction.

The Quincy Smelter

To negotiate the dramatic change in grade between the mine site and smelter, the Quincy Company operated a tramway that hauled rock down to the stamp mill (no longer existent) below. Although it was removed, the tram is being partially replicated to bring visitors to the underground tours conducted by the Quincy Mine Hoist Association. The tramway will travel halfway down the hill to an opening, called an adit, that tunnels horizontally into the underground workings of the mine. In addition to providing access to visitors, the adit also serves Michigan Technological University students and faculty who use the mine for training and research.

At the base of Quincy Hill, the smelter juts out from the shoreline of Portage Lake on a site that remains physically and visually distinct from its surroundings. Built in 1898, the Quincy Smelting Works is the only remaining smelter associated with Michigan copper mining; many mining historians believe it to be the smelting works that best reflects the technologies of the late 19th and early 20th centuries. In addition, it is the only known late 19th century smelting works standing with machinery intact in the world.

Key smelter structures that were in place in 1920 remain today, as well as many of the secondary buildings and site features. Of greatest significance are the cupola and reverberatory furnace buildings. The reverberatory building houses melting furnaces built in the 1940s. From the melting furnace, the copper went to the refining furnace and then to the casting plant. These facilities, including a 1920 Walker casting machine, are still at the site. Although equipment has been removed from many of the buildings, the heart of the smelting works survives, as do many objects of significant interpretive value, such as the 1919 Corliss-valved steam engine, the slag buggies, and the copper molds and ladles.

The remnant of elevated rails, rail cars, and slag piles and their relation to the industrial buildings continue to show the complex's coordinated inner workings. Adding to the site's feeling of integrity and association as a turn-of-the-century industrial landscape is the canal-side courtyard with piers from which copper ingots were once shipped to market. With the exception of the 1898 smelter office, which is in excellent condition and has its original interior including furnishings in place, the smelter structures are in fair to poor condition. Most of the buildings were constructed of local Jacobsville sandstone and are handsome, solid structures. However, severely deteriorating windows and roofs have permitted rain and snow to enter and undermine their structural soundness.

Management-Related Buildings

Returning up Quincy Hill via U.S. 41 from the smelter, the company's primary administrative building and the houses of its captains and the mine agent front the highway. To accommodate its chief administrative officer at the mine, the Quincy Mining Company built an elaborate 2½ story Italianate structure in 1880. It remains in a well-preserved state, near several more modest mining officials' homes that are in relatively poor condition. At the southern end of "management row" is the 1897 General Office building constructed of local Jacobsville sandstone. Colonial revival in form, the building

features a hipped roof, gabled pavilion, and large, round-arched windows.

Worker Housing Areas

Much of the extant housing built by the Quincy Mining Company, and the neighboring companies that it acquired, cannot be seen from the core industrial area. The company clustered the dwellings it built for its workers into small, distantly spaced enclaves. The names of these housing clusters — Limerick, Singsing, Frenchtown, Hardscrabble, Pewabic, Franklin, and Backstreet — reflect both the character of the place and the ethnic nature of the communities. Single-room log miners' houses now covered with clapboard stand in Limerick. Examples of the slightly larger "telescope houses" on mine-rock foundations are also present. In Lower Pewabic a few rows of houses that were constructed in 1917 stand virtually unchanged. Although a number of these buildings have been removed, the row is basically intact. Near the cooling ponds and the 1918 hoist house, a saltbox-style house remains in stable condition. The identical houses that stood next to and across the street from this house are gone. On the west side of U.S. 41, many early company houses are abandoned, subject to vandalism, and at risk of collapse due to structural failure.

Because the Quincy site has been subject to little development since the mines closed, the integrity of the site, and probably its archeological value, is high. Apart from several new houses on the west side of U.S. 41, there are few intrusions or nonconforming structures; modifications to houses have been minimal, although many houses have been lost. The upgrading of the old Calumet Road to a two-lane highway has somewhat altered the historic character of the site; proposed future development along the corridor may further diminish its historic integrity.

THE CALUMET UNIT

Although the urbanized area of Calumet appears as one continuous settlement, in fact it is a highly complex cultural landscape, reflecting a varied and rich historical development. During the local mining industry's period of peak activity circa 1910, Calumet served as a regional hub, growing to about 6 square miles in land area to support a population of more than 30,000 township residents. Today about 7,000 people live in the Calumet area. Components of the settlement include tracts appropriated for industrial use by the C & H Mining Company and other mining concerns, areas of company-built housing, and two incorporated villages that are primarily residential and commercial in character.

Stretching through the center of the settlement, parallel to U.S. 41, are the buildings and structures that represent the C & H Mining Company's corporate and industrial core. Neighborhoods of worker housing adjoin the industrial core on the east and west. Converging with clusters of mining company housing northwest of the industrial core lies the village of Calumet (called Red Jacket until 1929), a plot of about 90 acres laid out in a pattern of perpendicular streets and rectangular blocks in 1868. About 1 mile southeast of the village of Calumet, what is now the village of Laurium was mapped out along the eastern perimeter of the C & H housing districts beginning in 1878. Like Calumet, Laurium was also platted as a speculative real estate venture on a grid pattern. Incorporated as a village in 1889, Laurium grew to about 300 acres by 1900.

The C & H Mining Company was not the only mining enterprise that contributed to the building up of Calumet. Several other companies opened mines and constructed housing and community buildings on land adjoining the C & H Company holdings in the late 1900s. To also mine the Calumet conglomerate lode, the Tamarack and Osceola Companies located on land north and west of the C & H industrial core. The Centennial Mining Company subdivided an area on hills north of Calumet Village for private housing,

and officials of the Laurium Mining Company platted the village of Laurium.

Within the greater Calumet settlement area, the NPS Calumet unit comprises about 750 acres in the community's north-central section. Encompassing land in Calumet Township and the Village of Calumet, the unit's boundaries include the C & H corporate and industrial core, the entire village of Calumet, and areas of mining company housing that have retained a high degree of historic and architectural integrity. Included within the unit's boundaries are four discrete groups of buildings and structures that historically and spatially comprise distinct physical environments.

CALUMET AND HECLA (C & H) MINING COMPANY

Corporate and Industrial Core Area

Occupying about 400 acres, this area contains some 40 buildings and structures that were historically associated with the C & H Mining Company, including industrial facilities, buildings associated with the management of the company, and buildings put up by the company, or with company support, for community use. Two outstanding buildings of architectural design in superb condition are the C & H office and the C & H library. The properties associated with the C & H Company in the industrial core represent important aspects of the Michigan copper mining industry. In particular, they reflect themes associated with the growth and development of one of the nation's leaders in late 19th and early 20th century copper production — corporate paternalism, mining technology, and immigrant labor, among others.

Oriented along the copper lode, the industrial area extends from Calumet Lake on the north to the Osceola #13 shaft complex on the south. More than 100 miles of tunnels (drifts) were excavated from this lode. The primary concentration of buildings occurs near Red Jacket Road between the limits of Calumet Village and U.S. 41. Churches, warehouses, a

library, a boiler house, and two schools reflect the wide range of historic resources in the corporate and industrial zone.

Since the close of the mining company's operation in 1968, the large tract of company-owned land originally incorporating the mine site has been divided up and sold, primarily to private interests. A number of buildings in the industrial core have been adapted to new uses, and some buildings are vacant. Also included are parcels of unoccupied land that once were taken up by company structures, buildings, and railroad tracks. Except for Agassiz Park, now owned by the Village of Calumet, former C & H-owned land lies in the political jurisdiction of Calumet Township.

Industrial Buildings and Structures. The Calumet conglomerate lode occurs in a narrow belt about 2.5 miles long, trending from the northeast to southwest. When mining first opened the load in the mid-1860s, the Calumet Mining Company located north of what is now Red Jacket Road, while the Hecla Mining Company worked the portion of the deposit directly south. Both companies were underwritten by the same group of Boston-based investors; in 1871 they were consolidated as the Calumet and Hecla Mining Company (C & H).

Eventually, C & H mined the copper-bearing lodes from 16 shafts that extended in a line paralleling Mine Street — from the vicinity of what is now Pine Street on the north to Osceola Road on the south. Reflecting the company's early history, the shafts sunk on the northern section of the site retained the Calumet designation while those south of Red Jacket Road were identified as the Hecla and the South Hecla group. These designations also reflected the company's practice of developing and managing its operation as three functional units.

Today four of the shaft headframes built by the C & H remain in the industrial core area — Osceola #13, Centennial #3, Centennial #6, and the Kingston headframe. The Osceola #13 shaft complex is at the southern limit of the industrial district and within park boundaries. That shaft, originally part of the Osceola Mining Company,

was reopened by C & H in the 1950s and closed in 1968. The shafthouse complex is fairly modern, with most machinery and buildings dating from the 1960s. Notably, the mine's hoisting equipment is still intact.

The C & H Company removed all other shaft and rockhouses after the closing of the mine. The industrial structures that remain are concentrated along a corridor that corresponds with the linear orientation of the mine shafts. Surviving on the site are buildings and structures associated with the actual mechanics of the extraction process and a number of shops that housed the mine's maintenance and manufacturing functions. Also remaining are several dryhouses, essentially change houses for those working underground. A roundhouse, trestle, and gang shack are related to the company-operated railroad. Another group of structures functioned as warehouses, and several small buildings near the mine shafts served administrative purposes.

Throughout the mine site as a whole, the industrial buildings are vernacular, designed by C & H engineers or by Consulting Engineer Erasmus Leavitt. Representing the second generation of mine structures on the site, most buildings were constructed between 1880 and 1910. Virtually all are of masonry construction — coursed, gray mine rubble (basalt); red sandstone rubble, squared and coursed; or brick. Roofs are generally of slate or sheet metal and double-sloped. Construction details that add to the buildings' distinctiveness include contrasting stone quoins and segmentally arched lintels framing door and window openings.

Calumet Mine Site. North of Red Jacket Road, the Calumet mine site retains a number of significant industrial buildings, including the Superior steam boiler house with a 150-foot brick smokestack. Drills used underground were manufactured and sharpened in the drill shop (ca. 1885). Adjacent to this building is a dryhouse that serviced Calumet shafts #2, #3, and #4. Here also is the largest building within the mine complex, the #2 warehouse, which measures 80 by 440 feet. Standing nearby are the former pumphouse and an electrical power

substation. A number of new buildings have been constructed on the Calumet site, including the Calumet Township offices, a telephone company building, and several Butler-type storage buildings.

Hecla and South Hecla Mine Buildings.

Although some buildings on the Hecla side have been removed, many significant structures remain in fair to excellent condition, including an important grouping of shop structures. Machinery used in the mines was machined and fitted in the machine shop, originally constructed in 1882. North of the machine shop is the blacksmith shop. The brick building now occupied by the mining museum, Coppertown USA, served as the facility where wood patterns for machine parts were made. The patterns were used to set castings for parts made in the demolished foundry. South of the blacksmith shop is a building that was used to store the wooden patterns.

Another of the mine's large warehouses is within the Hecla complex, fronting on Red Jacket Road. Known as the Hecla warehouse #2, this brick structure stood adjacent to the railroad tracks that linked the Calumet and Hecla sites. Immediately to the south is a smaller structure that was used as a warehouse, although originally constructed as a hoist house. South of the warehouse is a close grouping of three small rubble structures — a railroad gang shack, an oil storage building, and a mine captain's office.

Completing the complex of buildings on the Hecla property are a small main car house, a community bathhouse, a fire station, a roundhouse in which the turntable has been preserved, and a paint shop. A substantial brick building fronting on Calumet Avenue, the bathhouse, was constructed by the C & H Company in 1913 for employees and their families; it had shower facilities in the basement and a swimming pool on the main floor. The fire station, paint shop, and 1888 roundhouse have lost their original form and appearance through alteration for contemporary use. Although the railroad tracks have been removed throughout the location, in places routes remain visible.

The portion of the Hecla mine area directly south of the Sixth Street Extension road has also been significantly altered by the recent construction of a group of commercial buildings. This development impacts the industrial landscape by introducing a contrast of building form, material, size, and color and by the addition of large commercial signs. The foundations of the Frontenac engine house and carpentry shop were among the many archeological remains that were destroyed by the new construction. South of the development site, the former South Hecla Mine, now occupied by trees, brush, and wetlands, has only one significant structure, the sandstone Hancock and Pewabic boiler house.

Corporate and Community Buildings. Two architecturally outstanding buildings dominate the primary entrance to the mine: the C & H general office building and public library are opposite each other on Red Jacket Road. Designed by the Boston architectural firm of Shaw and Hunnewell in the 1890s, both structures are built of multicolored stone laid by Italian stonemasons. The general office building, somewhat altered but well maintained, now houses a medical clinic and the park headquarters. The library, constructed for use by company employees and residents of the Calumet school district, was lavishly furnished and stocked with thousands of books selected by librarians, with management approval. Little altered and very well maintained, the building now serves as offices for Champion International, the firm that now owns and manages former C & H real estate holdings.

Two other buildings adjacent to the company's general office building also have strong historical associations with the company's management. The Miscowaubic Club, an athletic and social club operated by the C & H Company, continues now as a private membership club. The house the company built in 1895 for its long-time president Alexander Agassiz, for his twice-yearly inspection of the mines, now serves as a social service agency.

The C & H Mining Company figured significantly in the provision of public

education to the Calumet community, assuming a controlling role in the fiscal operation and educational program of the school district. Prominently sited north of the cluster of corporate buildings are two large school buildings that now face each other across an expanse of lawn. The 1905 high school and the 1929 middle school building were built by the company and leased back to the school district for a modest fee. They still serve their original purposes. A new elementary facility, now under construction, has been designed to complement the historic integrity of the two original school buildings. Efforts have been made, however, to use materials and design elements that are compatible with the existing buildings.

One of the most distinctive group of buildings within the western limits of the core industrial area is a tight cluster of four church buildings situated where Red Jacket Road terminates at Fifth Street. Episcopal, Presbyterian, Swedish Lutheran, and French Roman Catholic congregations constructed buildings on the site, called Temple Square, between 1893 and 1900. Dominating the group at the entrance to Calumet Village on Fifth Street is St. Anne's Church, a Gothic design adapted in red sandstone.

Set on a rise that further elevates the buildings' spires, the churches mediate between the company's industrial zone and the private domain of Calumet Village. Two themes are visibly portrayed by the church cluster — the involvement of C & H in the cultural and religious spheres of their workers' lives and the diverse ethnic heritage of the community. All four churches were built on mining company land, with construction subsidies provided by C & H. Currently, only the Episcopal and the Community (Presbyterian) churches continue their original function.

Agassiz Park. Another property historically associated with C & H is Agassiz Park, a large, triangular piece of land that lies between the industrial district on the east and Calumet Village on the west. First used as a commons area by residents to pasture animals, over the years the company sponsored a series of

improvements that converted the land to recreational use. In the early 1920s, under the direction of Massachusetts-based landscape architect Warren H. Manning, C & H developed the area as a community park in memory of company founder and president Alexander Agassiz. Manning's designs for the area featured a series of radiating linear paths that converged at a large statue of Agassiz situated near an entrance to the mine site. Moved from its original place in the park, the bronze sculpture now resides next to the former C & H library building.

Twenty years after its completion of the park, C & H began dividing up the land, leasing a large section for the construction of a school athletic field. Later, lots were sold for commercial use. In the 1970s, the Calumet Housing Authority put up a group of multiunit buildings in the southeast corner of the property. Land remaining from the original park, sold to the village of Calumet in 1990, is now maintained as a public recreation area. Today, only portions of the tree-lined paths survive to represent Warren Manning's landscape designs, but efforts are underway to restore some of these design elements.

Worker Housing Districts

To stabilize and control the efficiency of its workforce, C & H provided housing for its employees and their families, totaling as many as 1,000 dwellings in the Calumet area. The primary concentration of worker housing, built up around once-functioning mine shafts, stretches along the eastern boundary of the industrial core. Smaller housing enclaves are concentrated around the north, south, and west edges of Calumet Village. At least 200 dwellings, including a number of those originally built by the Osceola Mining Company that was later consolidated by C & H are within the park boundaries. Although the mine shafts that gave rise to the dwellings are long absent, these former locations are still distinguished by their traditional names — Albion, Blue Jacket, Newtown, and Raymbaultown, among others.

Although laid out in a planned fashion, street geometry within the worker housing areas does not follow the right-angled gridiron plan as found in Calumet Village. For the most part, streets are straight, but blocks are generally long. Lots are narrow; and houses, set very near to each other and the street, have small front and side yards. Streets are now paved, but they remain uncurbed. Lots still bear the consecutive numbering of the C & H inventory. In winter, some houses still retain "snow walks," the arrangement of planks on wood supports that connect house entries to the street.

The C & H Company constructed worker houses from standardized plans. One of the more recurrent types, dating from as early as the 1870s, is a side-gabled double house. Most prevalent is a 2½ story, single-family dwelling with the gable oriented to the street. All dwellings rest on foundations of waste rock (termed "poor" rock); a few still retain their original narrow clapboard siding. In addition to houses, the company also built barns and fences to encourage miners' families to plant gardens and keep livestock. Although the fencing has disappeared, some original outbuildings still exist.

Contrasting with the miner's dwellings are a group of homes that C & H constructed for its managers along Calumet Avenue near the company's headquarters. Built around 1900, these large, opulent houses shaded by mature maples trees are set on more spacious lots. Here, too, the company used standardized designs; examples of several different types are apparent.

Because houses were often put up in groups to meet the periodic nature of labor demand, some sections of streets display a unified identity based on the repetition of identical house forms. In other areas, houses are diverse in design, probably due to the C & H practice of allowing employees to put up their own houses on company-leased land. Since the sale of C & H residential properties to private individuals beginning in the 1930s, houses and landscape elements have been adapted for use by successive occupants. Re-siding, the addition of enclosed porches, new windows, and street-

front garages account for many of the changes made to the properties. Alterations are particularly apparent in the case of double-houses now under dual ownership, where each property owner has modified the structure in different ways.

Calumet Civic and Commercial Area

Extending along both Fifth and Sixth Streets between Scott and Pine, the Calumet Village civic and commercial district encompasses portions of some 15 blocks containing more than 100 buildings that share similar characteristics of type, form, materials, and historical development. Platted in 1868 and incorporated in 1875, the Village of Calumet (named Red Jacket until 1929) grew up on the northwest edge of the Calumet and Hecla Mine. The Calumet downtown district represents the geographic center of commerce and culture within this industrial community, which flourished between the 1870s and 1910s. Surviving buildings represent the district at its peak period of development, when it served as a regional center of commerce and culture.

The corporate policies of the C & H Mining Company, established by its long-time President Alexander Agassiz, had a direct and major effect on the character of building development within Red Jacket Village. Agassiz's early determination to prohibit stores, saloons, and any other commercial activity on company-owned land channeled all early business development to property privately held in Red Jacket. The village subsequently became the social and commercial area for the entire Calumet mining district.

The commercial buildings of Calumet Village — stores, saloons, banks, and general business blocks — play a central role in defining the community's collective image. Their number, size, and dense concentration gives these buildings prominence in shaping the overall physical character of the village. Rectangular in plan and ranging from one to four stories, many buildings in the district abut each other to form a continuous wall along the street. The buildings

present facades of wood, local red sandstone, and brick embellished with stock elements, sometimes in lavish combination — terra cotta trim, metal cornices, turrets, bays, and cast iron columns. Several episodes of construction are represented: small, false-front frame structures built before 1890 and the more substantial stone and brick business blocks that are evidence of a second period of intense commercial building activity between 1895 and 1910.

Because the village's commercial structures were constructed during a relatively short boom period, they reflect a narrow range of styles. Although the facades of the early frame structures have very simple architectural treatment, the larger masonry buildings are more ornate and varied in terms of materials and design features. Several architect-designed buildings show Renaissance historical references; a number of others can best be categorized as local adaptations of the Richardsonian Romanesque style. The most distinctive of these are constructed of local Portage Entry sandstone. Notable examples include the former Vertin's Department Store (late 1880s, expanded 1899); the former Peter Ruppe and Son Store (also expanded in 1899); and the Kinsman Building and the 1898 Ryan Block, each featuring commercial space on the first floor with flats above.

Civic buildings within the Calumet downtown district are grouped together on Sixth Street near Elm, including the 1898 Red Jacket Fire Station and the Red Jacket Village Hall and Opera House (now the Calumet Town Hall and Theatre). The addition of a 1,200-seat opera house and new village offices to the existing 1885 town hall building affirmed the village's wealth and confidence at the turn of the century. Next to the theatre is a small lot that was historically maintained by the village as a green space; the original 1868 village plat reserved no land for public parks. Both the village hall and the theatre continue their original use; the fire station is now a museum.

Although alterations to the storefronts of most buildings have changed their original appearance, and fire and demolition have left

gaps in the urban fabric, taken as a whole the district has retained sufficient integrity to convey its identity as the settlement's civic and commercial center. The structures that have been lost to fire or demolition are not numerous enough to lose the general effect of the streetscape; the essential scale and massing of buildings making up the streetscape remains.

Calumet Village Residential Area

The Calumet Village residential district contains approximately 160 dwellings within an area of about 15 blocks. Generally, the area of residential development extends from Spruce Street on the north to Scott on the south. The eastern boundary runs through the alley between Sixth and Seventh; on the west the boundary ends at the village limits on Ninth Street.

Built primarily between 1880 and 1910, houses in the area range from small, 1½ story, end-gabled dwellings to large and elaborate interpretations of Queen Anne and Classical Revival styles, concentrated primarily along Eighth Street. Although most homes are single-family dwellings, double houses and a row house unit are also represented; virtually all of the houses are of wood frame construction.

In response to the locally harsh climatic conditions, most houses have been altered through re-siding, new roofing, and the addition of porches and garages. A public school and four churches, including the twin-spired Romanesque St. Paul's, are interspersed among the district's dwellings. Although there are a number of instances where infill housing has replaced original dwellings lost to fire or demolition, overall the area has retained integrity sufficient to convey its historic and architectural significance.

Despite the village's small area, there is some range of variance in streetscape character. Commonly, houses are set quite close to the street, and to each other. Many have little, if any, front yard space. Where there is available yard space, trees are planted in the narrow public right-of-way between the sidewalk and

the street. On larger lots, hedges are frequently used to create private space, buffering houses from the street and adjoining properties. Notably, along sections of Eighth Street, houses are sited back from the street. Some homes here occupy several lots, which allows for larger yards; mature trees planted in the parkway arch over the street. Here and nearby on Pine Street, low sandstone walls enclose a number of properties.

The Calumet Residential District reflects aspects of the social organization of the Calumet industrial community. In contrast to tracts of worker dwellings on company-held land, village housing was privately built, mostly by those associated with the area's primary center of commerce on adjacent blocks to the east along Fifth and Sixth Streets. The churches and school building survive to represent the community's cultural life and diverse ethnic heritage.

RELATED AREAS

Torch Lake

Torch Lake was the site of both the C & H and Quincy stamping operations. Along the shores of Torch Lake are several prominent reminders of Keweenaw milling and reclamation efforts. The Houghton County Historical Museum is housed in a C & H mill office building. Tall stamp mill ruins near Tamarack City also evoke this critical step in the mining process. A dredge used in reclamation efforts is also visible from the roadside along Torch Lake, as is a group of workers' houses associated with the Quincy Company's stamp mill at Mason.

Cliff Mine Site

The Cliff and Minesota Mine sites were the first to demonstrate convincingly the potential profits to be made from Keweenaw copper in the district's early, speculative years. Both relied on the working of fissure deposits, where masses of pure native copper could be found, and both had already been mined by Native Americans. The richest Keweenaw copper deposits in the long

run were the amygdaloid and conglomerate lodes (see appendix A), but the first Keweenaw copper boom was based on the fissure deposits. By 1849 the Cliff Mine operation paid the first dividends that came to investors in Keweenaw copper mining ventures. The Cliff Mine, in the 1850s, was the largest in the district; by 1870, its production had fallen dramatically and it was closed.

Painesdale National Historic District

Painesdale National Historic District encompasses a planned, company town that retains significant integrity of worker and management housing and industrial buildings. The town was named after William A. Paine of Boston, founder of Paine, Webber and Company brokerage firm; the firm was a majority stockholder in the Champion Copper Mine around which Painesdale was constructed. Champion's parent company, the Copper Range

Company, developed the southern half of the district's largest mines including the Atlantic, Baltic, Isle Royale, and Champion. After Calumet and Hecla Consolidated Copper Company, the Copper Range Company was the largest consolidated mining company in the district in the 20th century. The Champion Mine was an important producer between 1899 and 1916.

Today, Painesdale is distinct for its mountainous waste rock piles, rows of stock-designed workers' housing, New England colonial-style management housing, masonry industrial buildings, and steel-frame shafthouse. The shafthouse was the first steel frame shafthouse in the district and is now in the hands of a nonprofit group seeking the structure's stabilization. Workers' houses, most often saltbox-style duplexes and front-gable single-family and duplex houses, stand in rows following the hilly terrain.

NATURAL RESOURCES

CLIMATE

The Keweenaw Peninsula has a continental temperate climate with warm summers and cold winters. Temperatures are moderated by the proximity of the Great Lakes. The mean daily temperatures are 18°F for January, 40°F for April, 64°F for July, and 48°F for October.

The average annual precipitation is about 40 inches. Much of that comes from the high average annual snowfall, which exceeds 200 inches; snow cover lasts about 150 days. This is largely the result of moisture-laden weather systems coming off Lake Superior.

GEOLOGY

The bedrock geology of both park units consists of the Portage Lake Lava series, Nonesuch shale, Copper Harbor conglomerate, and Freda sandstone. The Portage Lake Lava series consists of basalt and andesite lava flows interbedded with conglomerates. Copper filled the cavities and pore spaces in the series, forming the largest deposit of copper in the world. The Keweenaw fault separates the Portage Lake Lava series from the more or less flat Jacobsville sandstone, which lies east of both units.

SOILS/VEGETATION

Soils identified by the Soil Conservation Service (SCS 1991) in the Calumet unit include nearly level and gently sloping Udipsammets and Udorthents complex. Urban land is loamy to sandy soil, moderately to somewhat excessively well drained. In Calumet most of the land surface is covered by streets, parking areas, driveways, buildings, and other structures. The remaining land is used primarily for grass lawns, landscaped yards of exotic and native vegetation, recreational facilities, and abandoned lots.

Soils identified by the Soil Conservation Service in the Quincy unit include the same as those identified in the Calumet unit. In addition, the Quincy unit contains some soil types of 1%-8% slopes of Arcadian-Michigamme-Rock outcrop; 0%-8% slopes of Trimountain-net complex; 15%-70% slopes of Keweenaw-Kalkaska-Waiska complex; and dissected and waste materials from past copper mining.

Arcadian-Michigamme-Rock outcrop occurs as areas of shallow, well-drained Arcadian soil, a moderately deep, moderately well-drained Michigamme soil, and intermingled areas of Rock outcrop. The Trimountain-Net complex are deep soils that are well drained on low knolls and ridges as well as soils on small flats with stones and small boulders on the surface. Primary vegetation for these soil types is woodland. The Keweenaw-Kalkaska-Waiska complex consists of steep to very steep soils on dissected uplands, and erosion is severe. Northern hardwoods are dominant on these lands.

Mine dumps consisting of piles of poor rock (rock hauled to the surface but not milled) occur in both units. Some of this rock is used as road fill or rip-rap or is crushed for use as road gravel.

The Canadian coniferous forest dominates the general area and is characterized by balsam fir, white spruce, and paper birch. However, past mining activity stripped the area of lumber-bearing trees and much other vegetation. Since the end of most copper mining in the late 1960s, natural revegetation of grasses, shrubs, and young trees has been successful.

WETLANDS/FLOODPLAINS

No major streams or rivers traverse the park units, but the Quincy unit is adjacent to Portage Lake on the south. Neither the Calumet or Quincy units are within identified 100-year or 500-year floodplains.

Wetlands are common throughout the Keweenaw Peninsula, and several wetlands are identified in both park units. All identified wetlands are of the palustrine type (open water or saturated surface wetlands dominated by trees, shrubs, or emergent vegetation).

WILDLIFE

Wildlife species specifically inhabiting the boundaries of the park units have not been identified. However, wildlife species that have been identified in Houghton County and are likely to inhabit or use habitat in the historical park include white-tailed deer, black bear, coyote, tree squirrels, snowshoe hare, common raven, hawks, owls, and various songbirds.

THREATENED AND ENDANGERED SPECIES

There are no species of plants or animals in the park that are federally listed or proposed for listing as endangered or threatened. Also no critical habitat is known to occur in the park.

No state-listed species are known to occur in the Calumet unit of the park. However, three state-listed species are known to occur within the Quincy unit. The Rayless mountain ragwort (*Senecio indecorous*) is listed by the state as threatened. Both the Douglas hawthorn (*Crataegus douglasii*) and the Marsh willow-herb (*Epilobium palustre*) are listed as state species of special concern.

AIR QUALITY

The park is in a region that meets all national ambient air quality standards for sulfur dioxide, ozone, particulate matter, nitrogen dioxide, carbon monoxide, and lead. Isle Royale, the closest national park system site, is a class I area. A class I area has special protection under

the provisions of the Clean Air Act. All national parks in existence as of August 7, 1977, and more than 6,000 acres in size are class I areas. There are few major point sources of air pollution within 100 miles of the park. The closest for nitrogen dioxide, sulfur dioxide, and volatile organic compounds is the Champion International pulp and paper factory in Ontonagon, Michigan.

HAZARDOUS SUBSTANCES

All properties proposed for NPS ownership and/or operation are on the Keweenaw Peninsula, the site of more than 100 years of commercial copper mining and milling. Milling consisted of extracting elements of copper ore from mined rock by stamping the rock into small pieces and separating the ore from the rock through gravimetric sorting. The leftover crushed rock particles, called stamp sands, were discarded with the mill-processing water by pumping the mixture into Torch Lake. The milling process was not completely efficient, and copper (along with other heavy metals) was lost in the discarded stamp sands.

In later years technological advances allowed copper to be recovered from the previously deposited stamp sands. Dredges collected the sands, and an ammonia leaching process was used to recover copper and other metals. After reprocessing, the chemically treated stamp sands were returned to the lake. From the 1860s to 1968 more than 200 million tons of stamp sands were dumped into Torch Lake.

By September 1992, the U.S. Environmental Protection Agency had analyzed large sections of the peninsula to assess the nature and extent of contamination. In the course of its study, the agency found widespread contamination, designated a large portion of the area as the Torch Lake site, and listed it on the national

priorities list (NPL).^{2³⁴} The Torch Lake site is divided into three operable units, and certain properties that are within the boundaries of Keweenaw National Historical Park are within operable units of the site.⁵

Possible contaminants of concern are those typically associated with copper mining activities and include copper, arsenic, chromium, lead, and zinc, plus the chemicals used in flotation reprocessing (pyridine, oil, coal-tar creosotes, wood creosotes, pine oil, and xanthates). Asbestos, metals, and PCBs associated with reprocessing debris may also be present. Possible release mechanisms for these contaminants include dust emissions, runoff, and erosion from stamp sands and infiltration from soil through sediments. The potential

contaminant transport pathways to receptors involve air, groundwater, surface water, and sediments.

The Environmental Protection Agency and the state are currently involved in remediation of contamination within the Torch Lake site outside of the park. Much of the effort on land is focused on stabilizing stamp sands to prevent dust emissions.

Asbestos also was commonly used in insulating pipes and other materials associated with steam equipment. Drawings of mine sites identify underground steam pipes in utility trenches. Any hazardous materials assessment would need to include testing for asbestos.

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2. The National Priorities List (NPL) is a ranked listing (with about 1,300 facilities) of those sites in the nation that pose the greatest risk to human health and the environment.
 3. The Torch Lake NPL site is also on the Act 307 Michigan Sites of Environmental Contamination Priority List, the state of Michigan analog to the National Priorities List.
 4. NPL listing imposes a host of stringent procedural and substantive technical requirements for remediation and significant U.S. Environmental Protection Agency and state control over the cleanup process. The remediation of an NPL site is consequently very costly and time and resource intensive, with the Environmental Protection Agency estimating the average remediation cost of an NPL site at \$30 million. Acquisition of properties in the Torch Lake site would be the first time the National Park Service has acquired lands listed on the National Priorities List.

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5. At this time, the National Park Service lacks many of the EPA documents produced related to the Torch Lake NPL site. Such documents are collectively known as the “administrative record.” The overlap between the properties of potential interest for NPS ownership and/or operation and the Torch Lake NPL site appears to be significant. See, *Record of Decision, ROD Summary, Torch Lake Site, Operable Units I and III*, Houghton County, Michigan (U.S. Environmental Protection Agency, Region V) September 1992 [hereinafter ROD] at page 6. (“The Quincy Mining Company Historic District and the Calumet Historic District, which were proposed as a National Historic Park in September 1987, are located within the Site.”). See also ROD at pages 9, 13, 14, 16, 17, 22, and 23. In addition, an underground storage tank within the Calumet Historic District was listed on the state of Michigan’s priority list of contaminated sites.

REGIONAL VISITOR USE

VISITOR USE DATA

Current Visitor Use and Interpretation

Keweenaw Peninsula visitors participate in various recreational and educational activities. Federal, state, local, and private entities maintain many natural and cultural resources on the peninsula for public use. Forests and parklands offer camping, hunting, fishing, boating/canoeing, hiking, snowmobiling, cross-country skiing, snowshoeing, scenic driving, water sports, and other recreational opportunities. Harbors and lighthouses depict shipping on the Great Lakes, and museums depict daily life of past eras, the geology and minerals of the area, and other facets of a rich cultural heritage. Underground copper mines, company towns, mine shafthouses, festivals, historic districts, and area residents who continue old world traditions add a distinctive flavor to visitor experiences. Visitors find chapters of the story of copper conveyed at several sites, some of them within the boundary of Keweenaw National Historical Park.

Data collected in 1989 indicates that most visitors to the Keweenaw Peninsula are Michigan residents. Because of the long harsh winters, most visitors come in the summer; however, winter activities are growing in popularity, and many visitor service providers have expanded, and will continue to expand the tourist season with year-round activities that include lighted cross-country ski trails, hundred of miles of snowmobile trails, and ski touring. The National Park Service plans to have all major NPS facilities open all year.

Because it was only recently established (October 1992), the new park's visitor use is minimal. Most visitor experiences within the park are informal — seeing the landscape, streetscape, and historic structures and meeting local business owners and residents. The main park attractions are walking tours of Calumet's historic business district, the Coppertown Museum, the Calumet Theatre, the Calumet

Firehall, a tour of the Quincy mine hoist, and an associated underground mine tour. The Calumet walking tour brings visitors into close contact with many of the historic buildings and landscapes associated with the copper mining era. Although these buildings are privately owned, some, such as business, churches, local government offices, and cultural attractions, are open to the public.

The Quincy unit's hoist and mine tours are operated by the Quincy Mine Hoist Association in cooperation with Michigan Technological University. These tours provide visitors with a glimpse of what the historic mining life was like in the 19th and early 20th centuries.

At the Quincy unit visitors can hear the story of Quincy Mining Company, visit a gift shop and historical displays, and take a guided tour of the world's largest steam hoist, shafthouse, and underground mine to gain insight into the first American mineral boom. A cog-rail tramway, connecting the hoist and the mine entrance, will open in 1997.

Visitors who walk or drive through the Calumet community find the heritage of a remarkable ethnic conglomerate reflected in the neighborhoods, surnames, foods, and traditions of the current residents. Brochures describing walking tours of commercial and residential areas are available at several locations.

The first scheduled interpretive programs were conducted by a seasonal ranger in summer 1995. Nearly 1,000 people attended NPS programs at several sites within and near the park. Limited funding threatens the continuation of seasonal programs. Permanent staff present programs at various locations, including onboard Isle Royale's *Ranger III* on its regular cruises on the Portage Lake when staff is available and there is a need for such programs.

The NPS administrative headquarters is in the historic C & H office building, and NPS

information and orientation is available at several cooperating sites (see below).

Cooperating Sites

The Keweenaw Peninsula and the associated themes of copper mining and life on the peninsula reach from Ontonagon to Copper Harbor to Baraga. A number of governmentally and privately operated attractions throughout the peninsula help tell the stories of the Keweenaw. These sites vary significantly in size and type of resources represented. Keweenaw National Historical Park is a new contributor to Keweenaw Peninsula visitor experiences. The fledgling park has an opportunity to augment existing visitor facilities and services and help visitors understand a broader story of Keweenaw's copper mining heritage.

Toward the goal of expanding the visitors' understanding of Keweenaw's story, several of these sites have agreed to become partners with the park through the park's cooperating sites program. The cooperating sites enhance visitor appreciation of the copper story, inform visitors about Keweenaw National Historical Park, and encourage visitor participation in the area's cultural, natural, and recreational opportunities. See appendix C for a list and description of these sites. Other historic attractions of note may be added at a later date as roles and responsibilities for cooperating sites are developed further.

A brochure describing these sites is available throughout the Keweenaw Peninsula. Signs have been erected at the sites to identify their cooperative role with the National Park Service and their association with the story of copper.

Visitor Use Statistics and Analysis

Because it is a new park, visitor statistics are not available to assess the quality of experiences and the length of visitor stay in the park. Procedures for counting visitors have not yet been developed for the park. Park boundaries are not widely known or well delineated for the

public. Visitor access to the Quincy mine hoist and mine tour is controlled and enables the association to count visitors. Access to the rest of the park is free and open. Many areas of the park, especially the Calumet unit, will always be open because it will not have a fixed number of entrance/access points that could be easily monitored for counting visitors.

Another unusual occurrence for a unit of the national park system is that the entire village of Calumet is in the park's boundaries. Residents and people who come to Calumet to work could not be counted as visitors. Discerning the difference between visitors and residents in a cost-effective way would be virtually impossible. Also, it will be common for many people to visit both units of the park on the same day, and double counting will be a problem when determining visitor use of the park.

Future Visitor Use of the Park

Examining the visitation recorded at a number of attractions on the Keweenaw Peninsula can provide some insight into what level of use might be expected at Keweenaw National Historical Park (see table 2). Based on the visitation recorded at some of these attractions, the potential number of visitors to the park is expected to be substantial. For example, in 1994 the Quincy Mine Hoist Association recorded about 37,000 visitors touring the rockhouse and steam hoist. Included in this figure were 14,000 visitors who were also able to tour the mine. The figure of 37,000 visitors can be taken as a minimum number of visitors to the park because the Quincy mine hoist is the major attraction of the Quincy unit of the park.

McLain State Park and Fort Wilkins State Park recorded more than 190,000 and 170,000 visitors, respectively, in 1996. Fort Wilkins State Park is at the extreme northeastern end of the Keweenaw Peninsula (35 miles from Calumet and 40 miles from Hancock), and McLain State Park is only about 10 miles west and northwest, respectively, from the Calumet and Quincy units. Most of the Fort Wilkins

**TABLE 3: VISITATION AT SELECTED ATTRACTIONS
ON THE KEWEENAW PENINSULA**

Visitor Attraction	1994 Visitation	1995 Visitation	1996 Visitation
Baraga State Park	46,703	53,019	46,689
Coppertown Museum	4,984	5,000 ^a	4,000 ^a
Fort Wilkins State Park	162,364	188,862	171,217 ^b
Hanka Homestead ^c	3,000 ^a	3,000 ^a	3,000 ^a
Houghton County Historical Museum	4,000 ^a	na	na
Isle Royal National Park	24,843	23,470	23,580
Keweenaw County Historical Museum	12,102	6,284 ^c	7,376 ^c
McLain State Park	160,319	192,000	190,700
Old Victoria	3,800 ^a	4,100 ^a	5,100 ^a
Porcupine Mountains State Park	412,071	443,000 ^d	368,000 ^d
Quincy Mine Hoist and Underground Mine	37,000	na	na
Seaman Mineralogical Museum	7,000 ^a	10,000 ^a	10,000 ^a
Twin Lakes State Park	32,473	45,960	52,433

SOURCES: The various visitor attractions provided data, respectively.

na = not available

a Estimated visitation.

b Park experienced a cold and rainy July.

c Counts registered visitors; not all visitors sign the register.

d Fiscal years, October to September.

visitors will take U.S. 41 right through and past the Quincy and Calumet units of the park, respectively. With this volume of recreationists passing so close to the park units, it is reasonable to expect that a large number of people will take the time to visit the park. In addition, with both units being so close to McLain State Park and its large tourist population, it is expected that many of these state park visitors would make a side trip to Calumet or Quincy to take advantage of the visitor attractions, restaurants, and shopping opportunities. A reasonable conclusion is that about 37,000 to 190,000 or more visitors might visit Keweenaw National

Historical Park annually in the next few years. In the future, visitation might reach even higher levels.

There are a number of other attractions within the park's boundaries — Coppertown USA (a mining museum), Calumet Theater, and the Italian Hall site are only a few of the historically important attractions. The Seaman Mineralogical Museum may open a branch museum in the park's Calumet unit (and possibly a training facility with a geology walking tour in the Quincy unit). This museum has an extensive and impressive collection of mineral specimens

(more than 60,000) that can be displayed for visitors. If the new branch museum is developed, it would attract substantial visitor numbers.

Although Keweenaw National Historical Park will probably be a day use park for most visitors, it will be another important recreational resource of the Keweenaw Peninsula. The number and variety of attractions and recreational resources found on the Keweenaw Peninsula all contribute to make the peninsula itself the destination for many thousands of visitors every year.

Most visitors will visit the park during June, July, and August. The peak use period will probably extend from late spring through early fall. The severe weather and high snowfall are expected to constrain visitation during the area's relatively long winter season. Many historic attractions on the peninsula are closed or operate under curtailed hours during the winter off-season. A growing number of visitors are still attracted to the seasons of fall colors, white snow, and spring's greening. Hunting, cross-country skiing, snowmobiling, and other fall and winter activities are contributing to off-season tourism on the peninsula. It can be expected that the park will receive some level of visitation throughout the year, and that winter visitation will mirror the peninsula's popularity as a winter recreational use area.

REGIONAL LAND USE AND REGIONAL VISITOR FACILITIES AND SERVICES

Ownership Patterns

Much of the Keweenaw Peninsula is in large tracts of forest land that are owned by a few companies who are mainly concerned with forest products. Two companies control lands and buildings that are important to the park; these two are the corporate vestiges of the Calumet and Hecla Consolidated Mining Company and Quincy Mining Company.

The populations of Houghton and Hancock have remained relatively steady, largely due to the

growth of Michigan Technological University, Suomi College, a number of state services, and Portage Health Systems. In the last 30 years most new primary home construction has occurred in the Houghton-Hancock area. Houghton has twice been ranked as one of the top 100 small towns in America. The creation of the park appears to have at least indirectly sparked a modest amount of new retail and service development in the Calumet area.

The Keweenaw Peninsula has seen a significant increase in second home sales. The most expensive homes are being built along the shores of Portage Lake, Lake Superior, and several inland lakes. The Keweenaw was recently described as one of the top five second home locations in middle America. In the last decade or so waterfront prices have gone from \$20 to \$50 a frontage foot to as much as \$400 a frontage foot. In addition to second homes, there are many small cottages called "camps" scattered throughout the peninsula that are used seasonally for recreation.

Within the Calumet unit of the park, new commercial development has recently occurred just south of the historic business district of the Village of Calumet. Further development is likely in this area because the owner of the new business also owns many undeveloped lots nearby. Currently, Calumet Township is the only governmental township that has implemented historic preservation ordinances within the area under its jurisdiction that is within the boundaries of the park. Other governmental units, including Calumet Village, have similar actions currently under consideration. In addition, however, none of the governmental jurisdictions have adopted effective land use controls. Consequently, it is possible that new businesses will be visually incompatible with the historic landscape. Some property owners are pressing forward with alterations to their property to avoid future land use regulations.

In and near the Quincy unit, there are plans for developing a new hospital and improving roads to serve this hospital. A road to access the hospital would cut through the land on which the historic bathhouse is located. The road may

compromise this important feature and conflict with the park's mission to preserve historic resources.

Houghton County does not have countywide zoning or comprehensive land use planning. Within the park boundaries, the village of Calumet and Calumet Township have adopted zoning ordinances and developed a comprehensive land use plan. Osceola, Quincy, and Franklin Townships have not adopted zoning or land use plans but have taken preliminary steps to get started on the process. To date, the Village of Laurium, near the Calumet unit of the park, has not adopted zoning or land use planning.

Local Historic District Ordinances

Under Michigan's Local Historic Districts Act, local government units can adopt local ordinances that allow for the creation of a commission composed of local residents who can designate structures and districts of historic significance, regulate work done on designated buildings, and identify and carry out overall goals and objectives for preservation in the community.

This process has already begun. The need for a historic district ordinance was officially recognized by the Calumet community and government units in 1993, when a historic district study committee was formed to begin developing a local preservation program. After community volunteers began work on a local survey, a required first step in the ordinance development process, the committee enlisted the assistance of the Western Upper Peninsula Planning and Development Regional Commission to secure the data needed to compile historic district study committee reports for potential historic districts within Calumet Village, Laurium Village, and Calumet Township.

The survey received major funding from the state historic preservation office, the three local government units, Coppertown USA Mining

Museum, and the National Park Service. An emphasis of the survey was to provide basic tools — maps, property photographs and information cards, and a computerized database — that will enable local governments and the National Park Service to better manage the community's historic resources.

Local representatives of the park's Quincy unit have also expressed an interest in exploring options for establishing preservation ordinances to protect properties in and around that park unit.

Future Land Uses

All copper mining on the Keweenaw Peninsula has now ceased. White Pine Mine ended standard operations in September 1995; the company plans to gear up for a several-year-long solution mining program, but that will employ only a fraction of the previous workforce. A project to open a copper mine near Gratiot Lake has been fully permitted. Those operations were suspended once it became likely that White Pine and its smelter were going to close. The company developing the Gratiot Lake Mine is currently investigating other arrangements for smelting and has not abandoned its project. Scientists from the People's Republic of China have made reconnaissance visits to the upper peninsula to examine the potential for renewed copper and iron mining (based on the direct maritime shipping access from the peninsula through the Great Lakes and St. Lawrence Seaway system).

Increased economic development in the Houghton, Hancock, and Calumet areas is resulting in the steady elimination of the "poor rock" or waste rock piles associated with the active mining period. This metamorphic rock is very useful for a number of road and building construction applications.

Potential for Coordinated Planning of Resource and/or Visitor Use Management with Adjacent Land Management Agencies

Three units of Michigan's state park system are cooperating sites of the park. They share a number of natural and cultural resources with the stories of the park. There has already been modest collaboration in natural and cultural resource management and visitor services with these parks, and there is great potential to do more. These parks, along with several local parks, provide primitive and modern camping, walking trails, and interpretive activities. Thus there is no need for the National Park Service to develop camping facilities of its own.

Isle Royale National Park shares the same geology and a very similar human use and occupancy story with the Keweenaw Peninsula. The remote location of Isle Royale, accessible only by water or air, and its predominant management for natural and wilderness values, seems to attract very different visitors than those who remain on the mainland. The numbers of visitors who actually reach Isle Royale is also quite small. Thus it seems likely that while there will always be mutual support and assistance between these two national park system units, they will generally serve very different groups of visitors.

Representatives from the National Park Service, U.S. Forest Service, the Michigan Department of Natural Resources, local governments, and the private sector are collaborating to coordinate the use of public lands and publicly accessible private lands throughout the Upper Peninsula.

Major Recreational Resources of the Keweenaw Peninsula

Listed below is a selection of recreational resources found on the peninsula. Areas with an asterisk (*) are cooperating sites.

National and State Recreation Areas.
Following is a list of national and state recreation areas.

Isle Royale National Park, Keweenaw County — The park, on Lake Superior and headquartered in Houghton, is accessible only by boat or seaplane. This national park offers boating, camping, and hiking in a wilderness environment.

Ottawa National Forest, Houghton and Ontonagon Counties — Camping is offered at the Sparrow Rapids, Lower Dam, Courtney Lake, Tanlund Lake, Bond Falls, Robbins Pond, Paulding Pond, and Deadmans Lake Campgrounds.

****Fort Wilkins State Park, Keweenaw County*** — This state park provides living history interpretation, boat tours, 165 campsites, picnic areas, hiking, fishing, and cross-country skiing. A lighthouse, boat launch, store, and bookstore are also onsite.

McLain State Park, Houghton County — A picnic area, 90 campsites, a trail for hiking and cross-country skiing, a bathhouse and shelter, beaches, swimming, fishing, all-season rental houses, and interpretation are available.

Porcupine Mountains Wilderness State Park, Ontonagon County — Recreation facilities include two developed and four rustic campgrounds with 210 campsites; a visitor center, 90 miles of hiking trail with backpacking, two interpretive trails, 16 rental cabins (three open year-round) accessible only by foot, a winter sports facility with alpine and Nordic skiing, seven picnic areas, one boat ramp, 93 waterfalls, the Summit Peak and Lake of the Clouds scenic overlooks, and hunting and fishing.

Twin Lakes State Park, Houghton County — This park offers 62 campsites, a picnic area, a boat ramp, a beach house, a nature trail, a state forest snowmobile trail, swimming, fishing, and cross-country skiing.

Baraga State Park, Baraga County — This park provides camping, hiking, and access to Keweenaw Bay.

State-Operated Harbors. The following is a list of state harbors.

Keweenaw County

- Copper Harbor – Offers day use accommodations, gas, water, electrical hookups, restrooms, showers, launch ramp, pumpout, and radio communications.
- Lac La Belle – Offers day use accommodations, gas, and launch ramp.
- Eagle Harbor – Offers day use accommodations, gas, water, electrical hookups, restrooms, showers, pumpout, and launch ramp.

Houghton County

- Houghton/Hancock – Offers day use accommodations, gas and diesel fuel, water, electrical hookups, restrooms, showers, pumpout, launch ramp, a courtesy car, and radio communications.
- Houghton – Offers only day use facilities.
- Grand Traverse Bay – Offers day use accommodations, launch ramp, and other limited facilities.
- Portage River – Offers river access.

Ontonagon County

- Ontonagon – Offers day use accommodations, gas, telephone, water, electrical hookups, restrooms, showers, haul-out facility, pumpout, launch ramp, and radio communications.

Other Local Government Recreational Facilities. Following is a list of other local government recreational facilities.

Calumet Agassiz Park – Offers grills, picnic tables, and a basketball court.

Calumet Waterworks Park – Offers a pavilion, volleyball court, and a ramp to the beach for the handicapped.

Hancock Park – Offers camping, a beach, and boat launch.

Houghton Park – Offers camping, a beach, and a large outdoor play area.

Lake Linden Park – Offers camping and a boat launch.

Laurium Bicentennial Park – Offers hookups for recreation vehicles and a tennis court.

Swedetown Recreation Area – Offers the only lighted cross-country ski trail in the area; also has a chalet, ponds, fishing, and a handicap-accessible pier.

Numerous county maintained roadside parks along Lake Superior.

Groomed cross-country ski areas are located in Swedetown, Maasto Hito (Hancock), Michigan Technological University, Chassell, and Copper Harbor.

The National Park Service is working with the Keweenaw Tourism Council, local governments, and paddlers, to develop the Keweenaw Water Trail for use by canoes and sea kayaks. These organizations are also working toward the long-term goal of having the Keweenaw Water Trail circle the peninsula from Portage Lake around Keweenaw Point and back.

THE SOCIOECONOMIC ENVIRONMENT

COUNTY AND REGIONAL CHARACTERISTICS – OVERVIEW

Much of the consumptive use of the peninsula's natural resources has been replaced by nonconsumptive uses as the economy has evolved. Considerably fewer people are now supported by the local economy by providing the resource base for a growing tourism industry (see services in table 4). Many parks, including Isle Royal National Park and other attractions, provide a focus for summer activities. Heavy winter snowfall, averaging more than 200 inches, and hilly topography provide the basis for winter sports — cross country-skiing and snowmobiling. Roads and thoroughfares are well maintained, and snow removal is excellent. The forests, lakes, and extensive Lake Superior shoreline are fostering a growing, less consumptive, and hopefully more sustainable tourism industry.

POPULATION

In 1994 the state of Michigan ranked 8th in the country in population (see table 5).

Houghton County is one of 83 counties in Michigan. In 1994 Houghton County ranked 44th in population in the state. Keweenaw County was the least populated county in the state, and Ontonagon ranked 78th. Between 1980 and 1994 Houghton, Keweenaw, and Ontonagon Counties have declined in population, about -4.0 -5.0%, and -12.0%, respectively, while the state as a whole has increased +2.6% in population.

It is interesting to note that the seasonal number of visitors to the Keweenaw Peninsula, as evidenced by the annual visitation to Fort Wilkins and McLain State Parks (tables 3 and 5), is several times the combined population of all three counties.

ECONOMY

In 1994 the national average per capita income was \$21,696. Michigan ranked 19th in the country, with a state average per capita income of \$22,192, which was 102.3% of the national average (see table 6). Houghton, Keweenaw, and Ontonagon Counties all had average per capita personal incomes well below the average for the state with 68.8%, 72.0%, and 74.8% of the state average respectively.

By far, the major individual employer in the region is Michigan Technological University (see table 7). Nearly 1,200 employees provide services to a student body of about 6,000 undergraduates and 600 graduate students. The next two largest employers combined provide only about half as many jobs.

The numbers of full and part-time jobs in the county economies are displayed in table 8. Compare these figures to the 1994 total of 5,019,749 jobs in the entire state and the relative size of the county economies become apparent.

Table 9 displays labor force projections for the three counties in the early 1990s. Unemployment was relatively high in all three counties at that time.

TABLE 4: KEWEENAW PENINSULA, TOP THREE INDUSTRIES IN 1994 IN TERMS OF EARNINGS

Primary Economic Sectors in Terms of Earnings in 1994				
State/County	Industry and Percent of Total Earnings	Industry and Percent of Total Earnings	Industry and Percent of Total Earnings	Total Earnings (Thousands of \$)
Michigan	Durable goods manufacturing (26.5%)	Services (23.2%)	State and local government (11.6%)	\$153,395,620
Houghton	State and local government (38.7%)	Services (21.4%)	Retail trade (11.8%)	\$324,378
Keweenaw	Services (25.4%)	Federal civilian government (22.5%)	Durable goods manufacturing (16.5%)	\$9,470
Ontonagon	Mining *	State and local government (14.4%)	Nondurable goods manufacturing (14.4%)	\$102,429

SOURCE: Regional Economic Information System, Bureau of Economic Analysis, Economics and Statistics Administration, U.S. Department of Commerce, May 1996.

* Not shown to avoid disclosure of confidential information.

TABLE 5: STATE AND LOCAL COUNTY POPULATIONS FOR SELECTED YEARS

State/ County	Year	Population*					
		1980	1990	1991	1992	1993	1994
Michigan		9,255,600	9,311,100	9,370,200	9,423,200	9,460,200	9,469,500
Houghton		37,900	35,500	35,800	36,100	36,100	36,400
Keweenaw		2,000	1,700	1,700	1,800	1,800	1,900
Ontonagon		9,900	8,900	8,900	8,800	8,700	8,700

SOURCE: Regional Economic Information System, Bureau of Economic Analysis, Economics and Statistics Administration, U.S. Department of Commerce, May 1996.

* Census Bureau midyear population estimates. Estimates for 1990–94 reflect state and county population estimates available as of October 1995.

TABLE 6: STATE AND LOCAL COUNTY PER CAPITA PERSONAL INCOMES FOR SELECTED YEARS

State/ County	Year	Per Capita Personal Income					
		1980	1990	1991	1992	1993	1994
Michigan		\$10,154	\$18,237	\$18,703	\$19,739	\$20,601	\$22,192
Houghton County		\$6,863	\$12,634	\$13,400	\$13,615	\$14,517	\$15,264
Keweenaw County		\$6,715	\$14,586	\$15,364	\$15,305	\$15,052	\$15,985
Ontonagon County		\$7,511	\$13,758	\$14,460	\$14,951	\$15,604	\$16,591

SOURCE: Regional Economic Information System, Bureau of Economic Analysis, Economics and Statistics Administration, U.S. Department of Commerce, May 1996.

TABLE 7: SELECTED MAJOR EMPLOYERS IN HOUGHTON AND KEWEENAW COUNTIES, JUNE 28, 1993

Employer	Number of Employees
Michigan Technological University	1,191
Copper Country Mental Health	322
Portage Health Systems (formerly Portage View Hospital)	321
Houghton County Medical Care	238
D & N Bank	198
Keweenaw Memorial Medical Center (formerly Calumet Public Hospital)	189
Suomi College	178
Mead Corporation	170
Calumet-Laurium-Keweenaw Public Schools	170
Upper Peninsula Power Company	163
Houghton-Portage Township Schools	159
K-Mart	154
Hancock Public Schools	133
Western Upper Peninsula District Health Department	121
Herman Gundlach	103

SOURCE: Houghton Chamber of Commerce.

TABLE 8: FULL AND PART-TIME EMPLOYEES BY MAJOR INDUSTRY FOR 1994 (NUMBER OF JOBS)

Industry	Houghton County	Keweenaw County	Ontonagon County
Farming	198	0	143
Agricultural, Services, Forestry, Fishing, and Other ^a	(D) ^b	(D) ^b	76
Mining	(D) ^b	(L) ^c	(D) ^b
Construction	880	(L) ^c	162
Manufacturing	935	88	620
Transportation and Public Utilities	440	(D) ^b	132
Wholesale Trade	289	(L) ^c	83
Retail Trade	3,437	147	743
Finance, Insurance, and Real Estate	755	(L) ^c	139
Services	4,181	179	(D) ^c
Federal Government, Civilian	151	73	79
Military	131	(L) ^c	22
State and Local Government	4,295	99	643
Total	15,790	619	4,490

SOURCE: Regional Economic Information System, Bureau of Economic Analysis, Economics and Statistics Administration, U. S. Department of Commerce, May 1996.

a "Other" consists of the number of jobs held by U.S. residents employed by international organizations and foreign embassies and consulates in the United States.

b (D) Not shown to avoid disclosure of confidential information.

c (L) Less than 10 jobs. Estimates are included in totals.

TABLE 9: LABOR FORCE PROJECTIONS

County	Item	Fiscal Year 1991 7/91-6/92	Fiscal Year 1992 7/92-6/93	Fiscal Year 1993 7/93-6/94
Houghton	Labor Force	15,675	15,775	15,900
	Employment	14,175	14,250	14,400
	Unemployment	1,500	1,550	1,550
	Unemployment Rate	9.5%	9.7%	9.4%
Keweenaw	Labor Force	700	700	700
	Employment	575	575	600
	Unemployment	100	100	100
	Unemployment Rate	15.7%	16.0%	15.6%
Ontonagon	Labor Force	3,700	3,750	3,800
	Employment	3,325	3,300	3,350
	Unemployment	375	450	450
	Unemployment Rate	10.0%	11.8%	11.7%

SOURCE: *Annual Planning Information Report 1993*, Western Upper Peninsula Service Delivery Area.

TRANSPORTATION/ACCESS

The Keweenaw Peninsula is remote from the major population centers of the Midwest, table 9. Although the Keweenaw Peninsula is connected by a network of national, state, and local highways to the rest of the country, it still remains somewhat isolated by its geography and climate, especially during the winter season.

Primary access to the Keweenaw Peninsula is via U.S. 2 from the east, U.S. 41 and 141 and U.S. 45 from the south, and U.S. 2 from the west. Michigan Route 26 and U.S. Route 41 traverse the length of the peninsula. Vehicle access from lower Michigan is via Interstate 75 and the Mackinac Bridge. The Keweenaw is accessible to Canadian travelers via Sault Ste. Marie and via Duluth, Minnesota/Superior, Michigan. Access by air is available at the Houghton County Airport, which is midway between the two park units.

TABLE 10: MILEAGE FROM KEWEENAW PENINSULA TO MAJOR URBAN AREAS

Urban Area	Mileage
Duluth, MN	210
Minneapolis, MN	340
Green Bay, WI	215
Milwaukee, WI	340
Chicago, IL	425
Detroit, MI	570

SOURCE: The Keweenaw Tourism Council

Environmental Consequences



*Looking north from no. 2 shaft, no. 6 shaft in the background, Quincy Mining Company, circa 1915.
Photo courtesy of the Michigan Technological University Archives and Copper Country Historical Collections.*



*Looking south from no. 6 shaft to no. 2 shaft, in the mid-1920s, Quincy Mining Company.
Photo courtesy of Mr. John F. Campbell, from the Michigan Technological University Archives and Copper Country Historical Collections.*



Quincy shafthouse no. 2.

*From Keweenaw National
Park collection.*



IMPACTS COMMON TO ALL ALTERNATIVES

The following sections , as required by the National Environmental Policy Act, describe the impacts of implementing the four alternatives. Impacts that are common to all alternatives are described first.

IMPACTS ON CULTURAL RESOURCES

Impacts of Establishing Local Historic District Ordinances

As suggested in the “Alternatives” part, the creation of local historic districts through preservation ordinances by local governments would be the most effective means of protecting the historic values of private properties in the park units. Establishing historic district ordinances requires (a) continuing survey activities to document and evaluate historic resources, and (b) community consensus about the benefits of property regulation, the availability of expertise, funding, and citizen participation to develop and administer district ordinances.

Local preservation ordinances can provide the community with important tools for regulating work done to historic properties and for controlling new development that is compatible with existing community character. Conversely, if districts and ordinances were not established, development that is inconsistent with the area's historic building patterns could occur. This would diminish the very qualities — compact development, scenic views, and pedestrian scale, among others — that make the area desirable to current residents.

The effective functioning of local historic district ordinances would require substantial commitments of time and interest on the part of local citizens. If local historic district ordinances were enacted without broad community support, the effect could be divisive, impeding overall preservation efforts. Knowledgeable and committed citizens will need to take leadership roles in developing programs and policies to promote preservation goals. In addition, funding

for program staffing may be needed. In communities like Calumet, with small tax bases and increasing expenses, revenues to cover added costs might not be readily available.

IMPACTS ON NATURAL RESOURCES

Threatened and Endangered Species

These alternatives would not likely impact plant species potentially located in the Quincy unit that are currently listed by the state of Michigan as threatened or as species of concern. Should development be proposed in the future, a biological assessment should be prepared before initiating construction activities.

Although there are no plant or animal species identified as threatened or endangered in the Calumet unit, monitoring and assessment should be done periodically to determine whether conditions have changed. This would apply to any new park units or boundary expansions added to the park in future years.

Soils and Hydrology

Park development would likely be in the form of parking area construction, limited road widening, landscaping, structural preservation, and adaptive restoration. No major new NPS construction projects would be anticipated. Construction activities would cause short-term impacts such as noise, soil disturbance, and erosion. Increased paving would cause long-term but minor incremental increases in surface-water runoff. Most construction activity would occur on already disturbed sites.

Much of the short-term construction-related impacts could be effectively mitigated through implementing “best management practices” in the design and construction phases. The long-term mitigation of development impacts would be best accomplished through comprehensive planning in coordination with the community.

IMPACTS ON THE SOCIO-ECONOMIC ENVIRONMENT

Like all units of the national park system, Keweenaw National Historical Park does not exist in a vacuum. The local social and economic environment is affected by the existence and management of the park. The creation of the park has contributed to the local interest in historic preservation.

Also, some new businesses have come into being, and existing businesses have benefited from the creation of the park. This phenomenon has occurred in spite of the very limited NPS presence. The park would be another attraction on the peninsula that would contribute to the viability of the local tourism industry.

Although the park does not exist for the social or economic benefit of the local region or the state, it is likely to become an important economic and social asset for both. These important socioeconomic relationships will evolve over the years. The partnership concept for this park would ensure that the park and the local communities would become and remain closely connected in the years to come.

Under alternatives 1, 2, 3, and 4 (to a lesser degree) there would be a real possibility that some significant historic resources and aspects of the cultural landscape would be negatively impacted by neglect or inappropriate alteration driven by personal or market forces. Some historic resources might be lost.

IMPACTS ON VISITOR EXPERIENCE AND INTERPRETATION

Actions proposed as common to all alternatives would have a predominately positive effect on interpretation and visitor experience opportunities in the park. Joint NPS and community action at Osceola #13 mine would preserve a significant visual feature related to the copper mining and provide an opportunity to interpret the development of mining technology in the modern period. Partnerships between the National Park Service and other entities could

provide more diverse visitor experience opportunities than if each entity operated independently. These partnerships would support NPS interpretive efforts and coordinate historic preservation activities that are critical to visitor understanding and enjoyment of area resources and stories. Comparable standards for visitor services and facilities could be maintained throughout the region. Jointly developed preservation priorities would ensure that the most appropriate resources were selected for prompt attention.

IMPACTS ON PARK ADMINISTRATION AND MANAGEMENT

Relating to Proposed Legislative Changes

If the legislation were amended to remove the outright prohibition of acquiring contaminated properties, the National Park Service potentially would have more flexibility in what it could acquire. This could contribute to a higher quality visitor experience and the protection of key resources, especially when other avenues of protection fail.

Relating to Possible Acquisition or Management of Contaminated Properties

There would be a potentially significant cost to the National Park Service if it conducts the required pre-acquisition environmental site assessments required by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). It is difficult to predict definitively the cost of completing all assessments. Costs would vary depending on the properties identified for potential acquisition. The time involved to accomplish these surveys would depend on the availability of funds and the number of surveys needed for each property. The purpose of these assessments would be to determine the nature and extent of contamination and then weigh the benefits of acquisition against relevant costs, including the fair market value of the property, remediation costs, and potential damages.

If a decision to acquire contaminated properties is made (assuming the legislation has been amended), the National Park Service must determine whether liability is an issue and how to minimize exposure to potential liability. The probability of a suit or enforcement action by the Environmental Protection Agency or the state is relatively low in light of the EPA evaluation of the risk associated with NPS ownership and/or operation of the properties. Specifically, the record of decision for operable units I and III (which include properties within the park boundary) indicates that the EPA remedy for certain properties would be minimized if the National Park Service acquired the properties.⁶ If the National Park Service acquired the properties, the Environmental Protection Agency would implement soil cover and revegetation in certain areas while conducting no action at other areas.⁷ In addition, long-term monitoring of the affected properties would likely occur.

The National Park Service could minimize potential liability by pursuing a prospective purchaser agreement with the Environmental Protection Agency and the state by which the respective agency would covenant not to sue the National Park Service in the future for liability arising from NPS ownership or operation of currently contaminated properties.⁸ This action would avoid some of the liability exposure presented by the Comprehensive Environmental Response, Compensation, and Liability Act and might also potentially avoid the issue presented by 602 DM 2, which is concerned exclusively with sites presenting liability exposure

associated with hazardous substances contamination.⁹

Even with a prospective purchaser agreement, some exposure to potential liability and threats to human health and the environment could remain. The National Park Service therefore would need to ensure that all management activities associated with the site would avoid causing disturbance to and possible release of hazardous substances.

This *Draft General Management Plan* also proposes that the National Park Service conduct interpretive activities on property it does not own. While such activity would not be a concern based on the park's establishing legislation and 602 DM 2,¹⁰ CERCLA liability may apply if the National Park Service activities could be interpreted as that of an "operator" of the site. If such activities could be interpreted as exercising significant management control over a property, then under the Comprehensive Environmental Response, Compensation, and Liability Act, the National Park Service may become categorized as a potentially responsible party and could be held responsible for any contamination on that property.¹¹

9. See 602 DM 2. Section 2.2 states in pertinent part, "The requirement of this chapter shall not apply to real property to which liability will not attach, as determined in consultation with the Office of the Solicitor."

10. 602 DM 2 applies exclusively to real property acquisition, defined in section 2.5(B) as "real property obtained either through discretionary acts or when acquired by law, whether by way of condemnation, donation, escheat, right-of-entry, escrow, exchange, lapses, purchase, or transfer and that will be under the jurisdiction or control of the United States for any period of time, however short."

11. The courts reviewing this issue do not generally focus upon control of a facility's general operations but rather focus upon control over hazardous substance issues at a facility, e.g., whether the party controls the disposal of hazardous substances at a landfill. However, as any agreement with present owners of the park properties would likely enable the National Park Service to conduct some measure of construction and/or remediation activities that would affect hazardous substances, the National Park Service would probably meet a court's criteria for an "operator."

6. See record of decision, pp. 27–28.

7. See record of decision, pp. 44 and 46.

8. The situation presented at the park meets the criteria used by the U.S. Environmental Protection Agency to determine when the use of prospective purchaser agreements is appropriate. See, *Guidance on Agreements with Prospective Purchasers of Contaminated Property*, U.S. Environmental Protection Agency, Office of Enforcement and Compliance Assurance (May 24, 1995).

If liability were attached to the National Park Service, the financial implications would be significant and may include: cost of the EPA response activities if liability were established; the cost to implement a remedy to supplement the EPA activities; and costs for reducing risks associated with management activities.

IMPACTS OF IMPLEMENTING ALTERNATIVE 1 — NO ACTION

IMPACTS ON CULTURAL RESOURCES

Minimal staffing levels would limit the National Park Service's ability to implement the cooperative agreements and technical assistance envisioned in the park's establishing legislation, and there would be no way to carry out the legislated provisions for a grant program. The National Park Service could provide minimal additional technical support for the development of local preservation ordinances, and their development would depend primarily on local government and citizen efforts.

The National Park Service could not provide the level of support, coordination, and leadership that would facilitate local actions to protect historic buildings, archeological sites, and historic open space. The National Park Service would also be severely limited in its ability to help local groups or cooperating sites provide interpretation of copper mining history.

If local preservation ordinances were not backed by strong local support and adequate staff and financing, and without a grant program, significant buildings would likely continue to deteriorate and perhaps be lost. New development, without local preservation ordinances and design review process, would likely destroy significant archeological resources and important qualities of the historic landscape. The National Park Service would not be able to fulfill its mission of providing for resource protection. Cumulative impacts would likely include steady deterioration of historic properties. Uncontrolled new development would accelerate the losses of historic landscapes, archeological sites, and historic structures.

The implementation of this alternative would likely result in damage or loss of some significant historic resources through neglect, incompatible new construction, or poorly thought-out rehabilitations.

Places designated as cooperating sites might benefit from increased recognition, prestige, and visitation because of their defined association and identity with Keweenaw National Historical Park. Because there would likely be no funds available to provide financial assistance to property owners, significant resources related to the park's story could be lost or seriously impaired.

Because no boundary adjustments are proposed under alternative 1, significant cultural resources related to the park's story would not receive the potential benefits (NPS technical and financial assistance) of being included within the boundaries of the park.

IMPACTS ON NATURAL RESOURCES

There would not be significant impacts on natural resources as a direct result of NPS actions proposed in this alternative. There would be potential for the disturbance or destruction of wetlands and other open spaces currently in private ownership within park boundaries that could be subject to local development.

IMPACTS ON THE SOCIO-ECONOMIC ENVIRONMENT

The mission of the National Park Service — to provide for visitor services and to protect the resources — would not be successfully accomplished under this alternative. As a result, the support and enthusiasm of the general public, park partners, and the local community could diminish and might disappear. Economic benefits would be minor, with the annual park budget of about \$216,000 (1996 dollars). Enterprises that had been attracted to the area because of the park and its tourism potential might not choose to remain.

IMPACTS ON VISITOR EXPERIENCE AND INTERPRETATION

This alternative continues a trend of a static or shrinking interpretive budget. NPS reliance on other organizations, especially those managing cooperating sites, to provide most visitor orientation and interpretation services would likewise be continued. As visitation increases in the future, additional demands for visitor services would be imposed on local resources. Sufficient funds would not be available from either the National Park Service or local organizations to preserve, develop, and maintain resources and facilities necessary to maintain current and future visitor expectations.

Landscapes and structures related to the story of copper would continue to deteriorate or be replaced with modern developments. This loss, combined with previous losses, would cause incremental impacts on the historic integrity of the area's remaining resources. The number and quality of visitor experience opportunities would decline.

IMPACTS ON PARK ADMINISTRATION AND MANAGEMENT

There would be no new impacts under this alternative.

IMPACTS OF IMPLEMENTING ALTERNATIVE 2 — COMMUNITY ASSISTANCE

IMPACTS ON CULTURAL RESOURCES

This alternative would foster protection and interpretation of cultural resources by partners and individual property owners. This alternative would provide for a phased program for the park to build its staffing and funding levels so that the financial and technical assistance programs envisioned in the park legislation could be effectively carried out.

The park staff would eventually be able to provide a broader range of preservation technical and professional services to owners of historic properties. Park staff could also assist in obtaining services, expertise, and donations from non-NPS preservation specialists and scholars. The increased technical and financial support for establishing and implementing local preservation ordinances and a grant program would lead to a more effective and comprehensive local preservation program. As a result, compared to alternative 1, more of the important qualities of historic buildings, sites, and historic landscapes would be protected. There would still be potential for losses of historic properties or damage to their important qualities, but significantly less than in alternative 1.

Increased staffing and funding levels would help improve basic orientation and interpretation of the park story in the park units and in providing assistance to cooperating sites. The park would be able to carry out its legislated educational mission by working with a variety of partners. Programs could be developed that would allow residents to share their understanding of the Keweenaw's historic heritage. Greater appreciation of this heritage would, presumably, foster local support for continued preservation efforts.

Increases in visitation could lead to impacts on fragile cultural resources. Increased traffic (foot or automobile) could also affect the feeling of small-town or rural quiet that residents and visitors alike may value. Increased tourism would also heighten pressures for developments

such as roads, trails, parking lots, and the many services visitors would require for food, lodging, and transportation.

The information in the cultural landscape report (and historic resource study) would facilitate local preservation planning as well as increase knowledge about the landscape.

Implementing the rehabilitation of any historic building in accordance with federally prescribed preservation standards would avoid compromising the historic values of those buildings.

Some significant historic resources might be negatively and irretrievably impacted if the local preservation ordinances were not implemented and did not receive broad community support.

Because no boundary adjustments are proposed under alternative 2, significant cultural resources related to the park's story would not receive the potential benefits (NPS technical and financial assistance) of being included within the boundaries of the park.

IMPACTS ON NATURAL RESOURCES

The implementation of ordinances and preservation assistance and some increased visitor services would increase the attractiveness of the park to the public. This would cause a gradual long-term increase in traffic and related emissions in the park units, primarily during the summer season. The overall vehicular emissions on the Keweenaw would not be expected to rise, but the park and immediate surrounding area might experience some small measurable increase in vehicular emissions due to the additional traffic circulating in the units.

IMPACTS ON THE SOCIO-ECONOMIC ENVIRONMENT

Impacts under this alternative would occur gradually as various elements of the plan are implemented. The long-term gains in employment and park expenditures would accrue to the local economy due to the park being fully staffed and funded at a level of about \$1.08 million annually at full implementation (1996 dollars).

Short-term positive economic benefits in the form of temporary jobs and development expenditures for construction and preservation activities conducted by individuals and organizations would occur under this alternative. Federal grant money would encourage and help support some of these activities. These expenditures would benefit individuals, construction-related firms, and property owners. If federal funds were used to acquire park administrative and visitor orientation facilities, then the affected property owners would benefit from the one-time expenditures.

While some long- and short-term benefits might be significant for a number of individuals and firms, the direct impact on the overall county and regional economies would be minor due to the relative size of these economies. However, locally in Calumet and Quincy, these benefits might be significant.

Some nonmonetary social impacts would also occur. Local interest in historic preservation might be increased. A park visit would increase the public's (local and transient) historical and cultural awareness. Also, educational outreach programs would have a positive effect on schoolchildren and other visiting groups. These impacts would be beneficial for the public and the park.

Expanded operations would aid the tourism industry of the Keweenaw Peninsula. The park, as another attraction on the peninsula, might encourage visitors to stay longer. If so, local businesses and individuals would benefit because a longer stay usually increases tourist expenditures.

NPS activities and programs would complement and supplement local group and individual historic preservation and interpretation efforts. In some cases, NPS actions and technical assistance would be the direct or indirect cause of significant local historic preservation activities.

IMPACTS ON VISITOR EXPERIENCE AND INTERPRETATION

The National Park Service would foster interpretation and resource protection through partners, many of whom have a long history of such activities related to the story of copper mining. NPS technical and financial assistance would expand resource preservation efforts already begun by the private sector and stimulate new efforts. NPS assistance would also enhance basic orientation and interpretation at existing cooperating sites. This alternative would provide more opportunities to visit, understand, and appreciate Keweenaw's significant resources and stories than alternative 1.

This alternative substantially involves the community. Even with NPS assistance, interpretation and the protection of key cultural resources would be primarily the responsibility of private and public landowners. Local communities would shoulder much of the expense of preservation and interpretation to maintain high-quality visitor experience opportunities. The adoption of local ordinances and voluntary compliance through partnerships among local governments and private and public property owners would help ensure the protection of resources necessary for positive visitor experiences. As technical and financial assistance filtered into community activities, greater understanding and appreciation of the park story and resources would encourage more local support for preservation and interpretation. Visitor experience opportunities would be improved and preservation efforts would be advanced — culminating in a more viable park environment than now exists. However, the visitor experience would probably be much less integrated compared to the more traditional national park system unit.

The proposal to establish administrative and orientation functions in the Quincy unit would provide optimum administrative function and improve visitor orientation capabilities.

staff time and park funding would be dedicated to establishing and monitoring the agreements for those properties that received NPS technical and financial assistance.

IMPACTS ON PARK ADMINISTRATION AND MANAGEMENT

Because this alternative proposes an extensive assistance program to achieve objectives, most

IMPACTS OF IMPLEMENTING ALTERNATIVE 3 — TRADITIONAL PARK

IMPACTS ON CULTURAL RESOURCES

NPS acquisition of properties within the industrial core areas at Calumet and Quincy would provide for their long-term preservation. The restoration, adaptive reuse, and maintenance of these properties, completed in accord with accepted standards and federal review processes, would further promote the long-term preservation of such properties.

Without active NPS involvement in the development of local preservation ordinances in the housing and commercial areas, protection of those resources might take longer and there would be potential for the loss of integrity. Also, with very limited technical and financial assistance to those areas, important evidence of the community's social, commercial, and cultural history would receive less emphasis and preservation support, potentially resulting in the loss of historic resources.

The implementation of this alternative might result in gradual damage to or loss of some historic housing, social institutions, and nonindustrial historic landscape values. As a result, there might be the loss of resources needed to present a complete and balanced picture of the historic mining communities. Resources that document the social and domestic lives of workers and managers, community institutions, and the corporate paternalism of the mining companies are major parts of the park story; their neglect or destruction is more likely in this alternative than in alternative 4 because of their location outside the core industrial areas.

Because no boundary adjustments are proposed under alternative 3, significant cultural resources related to the park's story would not receive the potential benefits (NPS technical and financial assistance) of being included within the boundaries of the park.

IMPACTS ON NATURAL RESOURCES

This alternative would potentially generate higher visibility for the park than alternative 2. This would likely result in more visitation to the park in the long term. For the first three to five years as this plan is implemented, much of the visitation still would come from the traditional vacationers to the Keweenaw. After full implementation and greater public awareness, the park would also likely generate more park-specific visitation from outside the Keweenaw. This would result in an increase in traffic to the Keweenaw Peninsula and the park, thus causing a long-term but relatively low-level increase in auto exhaust emissions. These increases would not be expected to impact air quality conditions to any extent that would cause nonattainment of any major air pollution component.

IMPACTS ON THE SOCIO-ECONOMIC ENVIRONMENT

Impacts from this alternative would occur gradually as various elements of the plan were implemented. The long-term gains in employment and park expenditures would positively benefit the local economy due to the park being fully staffed and funded at a level of about \$2.45 million annually at full implementation (1996 dollars).

Short-term positive economic benefits in the form of increased temporary jobs and development expenditures related to construction and preservation activities conducted by the National Park Service would occur under this alternative. These expenditures would benefit individuals and construction-related firms. One-time expenditures of federal funds to acquire properties in the core industrial areas and grant money allocated to encourage private historic preservation efforts would provide short-term benefits to the affected property owners.

Some long- and short-term benefits might be significant for a number of individuals and

firms; however, the direct impact on the overall county and regional economies would be minor due to the relative size of these economies. These benefits might be significant in Calumet and Quincy.

Some nonmonetary social impacts would also occur. Local interest in historic preservation might be increased. A park visit would increase the public's (local and transient) historical and cultural awareness. Also, educational outreach programs would have a positive effect on schoolchildren and other visiting groups. These impacts would be beneficial for the public and the park.

Expanded operations would aid the tourism industry of the Keweenaw Peninsula. The development of the park as a significant NPS presence would create another attraction on the peninsula and might lengthen a visitor's average stay to the peninsula. If so, local businesses and individuals would benefit as a longer average stay usually increases tourist expenditures.

NPS activities and programs would mostly be independent of local group and individual historic preservation and interpretation efforts. Benefits resulting from cumulative actions would be inconsistent and difficult to predict. However, in some cases, NPS actions and technical assistance might be the direct or indirect cause of significant local historic preservation activities (via the historic preservation grant program).

IMPACTS ON VISITOR EXPERIENCE AND INTERPRETATION

This alternative would surpass alternatives 1 and 2 in providing visitor experience opportunities. Existing visitor uses would continue; additional NPS facilities, programs, and services would be available in the park's core industrial areas. A variety of activities and resources would meet the needs of a varied audience seeking different levels of involvement in the park. New, high-quality interpretation and educational media, facilities, and services related to the park's primary themes would be

offered by the National Park Service in a limited area.

Upon arrival to the core industrial areas at full implementation, visitors would see stabilized and restored historic structures and landscapes that create a sense of entering a special place and that contribute to understanding and appreciating the area's cultural integrity. Visitors would find personnel stationed at convenient locations to provide orientation, which would reduce the stress caused by the uncertainty of approaching an unfamiliar area. The National Park Service would have little involvement outside the core industrial areas at Calumet and Quincy. Visitor experience opportunities provided through interpretation and resource protection in those areas would be the responsibility of local communities with limited assistance from federal funding. Differences in funding and staffing between the core industrial area and surrounding areas could create divergent levels of visitor use opportunities and quality of experiences.

Some park user inconvenience would be encountered during stabilization and development of new facilities and media. The disruptions would be short term, and visitor experience opportunities would soon be significantly enhanced by the improvements.

IMPACTS ON PARK ADMINISTRATION AND MANAGEMENT

Because this alternative proposes NPS assistance activities primarily within the core industrial areas of each unit, the number of staff and the percentage of the total park budget dedicated to providing assistance directly or establishing and monitoring cooperative agreements for NPS technical and financial assistance would be less than that described for alternative 2.

IMPACTS OF IMPLEMENTING ALTERNATIVE 4 — PROPOSED ACTION

IMPACTS ON CULTURAL RESOURCES

With the development, over time, of staffing and funding to carry out the technical assistance and grant programs envisioned in the park's enabling legislation, effects on cultural resources would generally be the same as described for alternative 2 and as described under "Impacts Common to All Alternatives" for the local historic district ordinances. With the more comprehensive technical assistance and grant program under this alternative, however, the social, cultural and commercial aspects of the area's history would be better recognized and preserved within each unit.

In the long run, this alternative would generally provide for increased continuity of preservation in the park as a whole.

The boundary adjustments proposed in alternative 4 would ensure that additional significant properties related to the stories of the park would be included within the park's boundaries, and therefore eligible for NPS technical and financial assistance.

Cumulative Impacts

A cumulative impact, according to federal regulations, is the impact on the environment of many different actions regardless of what agency (federal or nonfederal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

There would be no significant adverse cumulative impacts on cultural resources anticipated from fully implementing this alternative. The presence of a strong partnership with the community and local governments and an adequately funded local preservation program, combined with NPS preservation and interpretation actions, would provide the best preservation effort for the park's resources.

IMPACTS ON NATURAL RESOURCES

This alternative would generate the most comprehensive level of protection and interpretation. This would likely generate more visitation than the other alternatives. For the first three to five years, much of the visitation still would come from the current traditional vacationers to the Keweenaw Peninsula. After full implementation and greater public awareness, the park and peninsula are likely to become a new destination for many visitors. This would cause a long-term but relatively low-level increase in auto exhaust emissions. This would not be expected to impact air quality conditions to any extent that would cause nonattainment of any major air pollution component.

Cumulative Impacts

Because most of Keweenaw National Historical Park would remain primarily in private ownership, there is a high likelihood that there would be cumulative impacts on natural resources within the park boundaries that are a result of actions taken by private owners as well as the National Park Service.

As the park grows and is increasingly seen as a tourist attraction, the various social and economic pressures might result in significant development in and around the park. The mere establishment of the park has already helped generate the development of a new shopping center next to a small wetland in the Calumet unit. This development resulted in a significant amount of paving that has increased surface runoff and interrupted hydrological conditions in that area.

Continued new development, especially on currently open, vegetated sites, would potentially result in the loss of plant and animal habitat, the filling of wetlands, and incremental increases in urban runoff. The long-term impacts would be incremental increases in

runoff that, combined with the already significant level of urban development (especially in the Calumet unit), would potentially contribute to soil erosion, flooded streets, and the degradation of stream courses and possibly wetlands. Additional potential impacts include substantially increased automobile traffic levels (and associated noise and pollution) generated by the park, new businesses, and new housing.

Through regulations and preservation ordinances, the community governments could play a major role in guiding this development and limiting its impacts on resources. This would have a positive overall impact on the aesthetic appearance of the cultural landscape and potentially limit levels of new development and its accompanying runoff and erosion.

IMPACTS ON THE SOCIO-ECONOMIC ENVIRONMENT

Implementing the preferred alternative would best fulfill the legislative vision for the park and provide for the greatest level of success in accomplishing the resource protection and visitor service missions of the National Park Service.

Impacts from implementing this alternative would occur gradually as various elements of the plan were implemented. The long-term gains in employment and park expenditures would positively benefit the local economy due to the park being fully staffed and funded at a level of about \$3.17 million annually at full implementation (1996 dollars).

Short-term positive economic benefits in the form of increased temporary jobs and development expenditures related to construction and preservation activities conducted by the National Park Service would occur under this alternative. These expenditures would benefit individuals and construction-related firms. One-time expenditures of federal funds to acquire properties in the park units and grant money allocated to encourage private historic

preservation efforts would provide short-term benefits to the affected property owners.

Some long and short-term benefits might be significant for a number of individuals and firms; however, the direct impact on the overall county and regional economies might be minor due to the relative size of these economies. However, these benefits might be significant locally in Calumet and Quincy.

Some nonmonetary social impacts would also occur. Local interest in historic preservation might be increased. A park visit would increase the public's (local and transient) historical and cultural awareness. Also, educational outreach programs would have a positive effect on schoolchildren and other visiting groups. There would be a real possibility that significant historic resources and some of the cultural landscape outside the core industrial areas could be preserved through park acquisitions, the historic grant program, and other public and private efforts. These impacts would be beneficial for the public and the park.

Expanded operations would aid the tourism industry of the Keweenaw Peninsula. The park and a significant NPS presence would create another attraction on the peninsula and might lengthen the duration of a visitor's average stay on the peninsula. If so, local businesses and individuals would benefit because a longer average stay usually increases tourist expenditures.

The preferred alternative would contribute to the growing tourism industry on the Keweenaw Peninsula. Improved programs for preserving resources and developing quality visitor experiences would contribute to the park's status as a *must see* attraction on the peninsula. These programs would complement the local government and private initiatives occurring outside the park, further improving the tourism potential of the area. NPS involvement would increase the regional and national appeal of the peninsula as a tourist destination.

The potential increases in visitation, traffic, and noise levels might diminish the perceived

quality of life enjoyed by some current residents.

IMPACTS ON VISITOR EXPERIENCE AND INTERPRETATION

This alternative combines the positive visitor experience opportunities described in alternatives 2 and 3. It eliminates many of the negative impacts of either of those two alternatives standing alone. It would provide the broadest level of resource protection, interpretation, and visitor services that create the optimum opportunity for high-quality visitor experiences.

Partnerships between federal and local interests and resources would increase the ability for the total community to protect significant resources. Visitors would have access to a more comprehensive variety of resources and more opportunities for dispersed use that offers less crowded, more enjoyable experiences.

Increases in federal staffing would significantly enhance the NPS interpretive presence at both the Quincy and Calumet units. Interpretive media and services and centrally located visitor center orientation/interpretation facilities would result in increased visitor satisfaction and decreased resource damage. Visitors would have the opportunity to choose from many activities to select those appropriate to their own interests. A variety of programs could encourage year-round visitation. Schools and other organized groups would benefit from increased access to specially designed education programs. All visitors, including those with disabilities, would be able to experience through audiovisual media those elements of the story that are not accessible (e.g., underground mining activity).

Some park user inconvenience would be encountered during stabilization and development of new facilities and media. The disruptions would be short term, and visitor experience opportunities would soon be significantly enhanced by the improvements.

Because the expanded park boundaries proposed in this alternative would encompass additional

significant resources that would be eligible for NPS technical and financial assistance, the visitor experience and interpretative programs of the park would be enhanced for park visitors.

Cumulative Impacts

There would be no significant adverse cumulative impacts anticipated from fully implementing this alternative. Improved interpretive programs and coordination of NPS and local preservation programs would provide the greatest opportunity for compounding the positive effects of individual efforts throughout the region. Combining NPS resources and the resources of local visitor service organizations should provide the best interpretation and visitor service opportunities and a viable national park experience that survives and expands in the future.

IMPACTS ON PARK ADMINISTRATION AND MANAGEMENT

Because this alternative proposes a comprehensive assistance program, which would be broader in scope in this alternative due to the expanded boundaries, extensive staff time and park funding would have to be dedicated to providing assistance or establishing and monitoring the cooperative agreements for those properties that received NPS technical and financial assistance.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The implementation of the preferred alternative would involve the commitment of capital, energy, materials, and labor to accomplish financial and technical assistance and preservation and adaptive use of historic structures and other cultural resources.

Some indirect effects would be local socio-economic activities stimulated by the implementation of the preferred alternative. These would likely be alterations in land uses in and

around the park that might cause loss of cultural landscape values and commitment of natural resources that cannot be recovered for other purposes.

RELATIONSHIP BETWEEN THE LOCAL SHORT-TERM USE OF THE ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Because full implementation would take many years, there would be some short-term loss of historic fabric due to the effect of weather and limited maintenance on historic structures. There also might be some minor loss of historic fabric in the process of preserving and adaptively reusing structures.

Public and private resources used for historic and cultural preservation might not result in immediate positive economic impacts for individuals or firms; however, in the long term, implementation would contribute to the overall long-term enhancement of regional economic productivity and cultural resource conditions within the park boundaries.

UNAVOIDABLE ADVERSE IMPACTS

The gradual development of the park would lead to minor to moderate alterations in the character of the area that for some would be a degradation in quality of life. These effects would include gradual increases in tourist and possibly commuter traffic; increases in air pollution and runoff; increases in property values, which could cause displacement of lower income residents; and new development in and around the park that might degrade current small-town qualities and historic landscape values.

ENERGY REQUIREMENTS AND CONSERVATION POTENTIAL

Energy requirements would increase for those structures currently unused and unheated that would be acquired, preserved, and adapted for park uses or leased for other uses. For some structures currently occupied, preservation and maintenance measures could result in energy-saving modifications. New private development in and around the park would also result in increased energy use.

TABLE 11: SUMMARY OF IMPACTS COMMON TO ALL ALTERNATIVES

Impacts on Cultural Resources	<p>Impacts of Establishing Local Historic District Ordinances. The creation of local historic districts through preservation ordinances would be the most effective means of protecting the historic values of private properties in the park units. Effective functioning of the ordinances would require substantial commitments of time and interest on the part of local citizens, and broad community support would be needed.</p>
Impacts on Natural Resources	<p>Threatened and Endangered Species. Plant species potentially located in the Quincy unit that are on the state list would likely not be impacted; a biological assessment would be prepared before initiating construction activities.</p> <p>Soils and Hydrology. No major new NPS construction projects would be anticipated. Construction activities would cause short-term impacts; increased paving would cause long-term but minor incremental increases in surface-water runoff. Much of the short-term impacts could be mitigated through best management practices. The long-term mitigation of development impacts would be best accomplished through comprehensive planning in coordination with the community.</p>
Impacts on the Socioeconomic Environment	<p>The park would be another attraction on the peninsula that would contribute to the viability of the local tourism industry. The park is likely to become an important economic and social asset for the local region and the state. Under all alternatives, alternative 4 to a lesser degree, there is a possibility that some significant historic resources and aspects of the cultural landscape would be negatively impacted by neglect or inappropriate alteration driven by personal or market forces. Some historic resources might be lost.</p> <p>There would be predominantly positive impacts on interpretation and visitor experience opportunities in the park. Joint action at Osceola 13 would preserve a significant visual feature related to copper mining and provide an opportunity to interpret the development of mining technology. Partnerships could provide more diverse visitor experiences than if each entity operated separately, and they could support NPS interpretive efforts and coordinate historic preservation activities that are critical to visitor understanding and enjoyment. Jointly developed preservation priorities would ensure that the most appropriate resources were selected for prompt attention.</p> <p>Relating to Proposed Legislative Changes. Removing the prohibition of acquiring contaminated properties would potentially give the National Park Service more flexibility in what it could acquire, which would lead to a higher quality visitor experience and the protection of key resources.</p> <p>Relating to Possible Acquisition or Management of Contaminated Properties. Assuming the amendment of the legislation, there would be potentially significant time and costs for the National Park Service if it conducts the required pre-acquisition site assessments. The National Park Service would have to determine whether liability is an issue and how to minimize exposure to potential liability and ensure that all management activities associated with the site would avoid disbursing or releasing hazardous substances.</p>
Impacts on Park Administration and Management	

TABLE 12: SUMMARY OF THE IMPACTS OF THE ALTERNATIVES

	Alternative 1 — No Action	Alternative 2 — Community Assistance	Alternative 3 — Traditional Park	Alternative 4 – Proposed Action
Impacts on Cultural Resources	<p>There would likely be damage or loss of some significant historic resources through neglect, incompatible new construction, or poorly thought-out rehabilitations.</p> <p>Significant cultural resources related to the park's story would not be included in the park boundaries and would not receive the potential benefits of technical and financial assistance.</p>	<p>In time, the financial and technical assistance programs and the NPS mission at this park envisioned in the establishing legislation could be effectively carried out. More of the important qualities of historic buildings, sites, and historic landscapes would be protected than under alternative 1, although there would still be potential for the loss of historic properties.</p> <p>Significant cultural resources related to the park's story would not be included in the park boundaries and would not receive potential benefits of technical and financial assistance.</p>	<p>NPS acquisition, restoration, adaptive reuse, and maintenance of properties in the industrial core areas at Calumet and Quincy would provide for their long-term preservation. Protection of resources outside the core industrial areas might take longer, and there would be potential for damage to or the loss of integrity of those resources. Significant cultural resources related to the park's story would not be included in the park boundaries and would not receive potential benefits of technical and financial assistance.</p>	<p>With the more comprehensive technical assistance and grant program under this alternative, the social, cultural and commercial aspects of the area's history would be better recognized and preserved within each unit.</p> <p>There would be no significant adverse cumulative impacts on cultural resource from implementing this alternative.</p> <p>This alternative would provide the best preservation efforts for the park's resources</p>

	Alternative 1 — No Action	Alternative 2 — Community Assistance	Alternative 3 — Traditional Park	Alternative 4 – Proposed Action
Impacts on Natural Resources	<p>There would be no significant impacts on natural resources as a direct result of NPS actions. There would be potential for the destruction of wetlands and other open spaces in private ownership within the park boundaries due to private development.</p> <p>Increased visitor opportunities and services would cause a gradual long-term increase in overall vehicular emissions; however, the overall emissions on the Keweenaw would not be expected to rise. Vehicular emissions at the park and immediate surrounding area might increase slightly.</p>	<p>With the generation of a higher visibility of the park, there would likely be more visitation in the long term. There would be an increase in traffic, and thus a long-term but relatively low-level increase in auto exhaust; however, increases would not be expected to cause nonattainment of any major air pollution component.</p>	<p>With the generation of a higher visibility of the park, there would likely be more visitation in the long term. There would be an increase in traffic, and thus a long-term but relatively low-level increase in auto exhaust; however, increases would not be expected to cause nonattainment of any major air pollution component.</p>	<p>Same as alternative 3.</p> <p>There would be a high likelihood of cumulative impacts on natural resources within park boundaries as a result of NPS and private owner actions. As the park grows, there might be significant development in and around the park, which would result in the loss of plant and animal habitat, the filling of wetlands, and incremental increases in urban runoff. These impacts would potentially contribute to soil erosion, flooded streets, and the degradation of stream courses and possibly wetlands. Other potential impacts include increased traffic. Regulations and ordinances could play a major role in guiding/limiting this development and mitigating its impacts.</p>

	Alternative 1 — No Action	Alternative 2 — Community Assistance	Alternative 3 — Traditional Park	Alternative 4 – Proposed Action
Impacts on the Socio-economic Environment	NPS mission would not be successfully accomplished. Economic benefits would be minor. Enterprises that had been attracted to the area because of potential tourism benefits might not remain.	While some long- and short-term benefits might be significant for a number of individuals and firms, the direct impact on the overall county and regional economies would be minor; however, locally in Calumet and Quincy, these benefits might be significant. Expanded park operations would aid the tourism industry on the peninsula and might encourage visitors to stay longer in the area.	Same as alternative 2. Long-term but gradual gains would positively benefit the local economy.	Same as alternative 2. Improved programs for preserving resources and developing quality visitor experiences would contribute to the park's status as a <i>must see</i> attraction on the peninsula and increase the regional and national appeal of the peninsula as a tourist destination. The increase in visitation, traffic, and noise might diminish the perceived quality of life enjoyed by some residents.
Impacts on Visitor Experience and Interpretation	NPS reliance on other to provide most visitor orientation and interpretation services would be continued. Sufficient funds would not be available to preserve, develop, and maintain necessary resources for current and future visitor expectations. Landscapes and structures related to the story of copper would continue to deteriorate or be replaced with modern developments. The number and quality of visitor opportunities would decline.	Even with NPS assistance, interpretation and protection of key resources would primarily be the responsibility of private and public landowners. Visitor experience opportunities would be improved and preservation efforts would be advanced, leading to a more viable park environment than exists now. Visitor experience would be less integrated than the more traditional national park.	Visitor experience opportunities would surpass those in alternatives 1 and 2. Existing visitor uses would continue, and additional NPS facilities, programs, and services would be available in the park's core industrial areas.	This alternative would provide the broadest level of resource protection, interpretation, and visitor services, which would create the optimum opportunity for high-quality visitor experiences. The expansion of the park boundaries would include additional resources for visitors to enjoy. There would be no significant adverse cumulative impacts from fully implementing this alternative. Combining NPS and local resources should provide the best interpretation and visitor service opportunities and a viable national park experience that survives and expands in the future.

	Alternative 1 — No Action	Alternative 2 — Community Assistance	Alternative 3 — Traditional Park	Alternative 4 – Proposed Action
Impacts on Park Administration and Management	There would be no new impacts.	Most staff time and park funding would be dedicated to establishing and monitoring the agreements for those properties that received NPS technical and financial assistance.	Because staff efforts would be directed only to the core industrial areas of the park units, the number of staff and the percentage of the total park budget dedicated to providing assistance directly or establishing and monitoring cooperative agreements for NPS technical and financial assistance would be less than under alternative 2.	Extensive staff time and funds would be dedicated to providing assistance or establishing and monitoring the cooperative agreements for those properties that received NPS financial and technical assistance.
Irreversible and Irretrievable Commitments of Resources				Implementing this alternative would involve the commitment of capital, energy, materials, and labor to accomplish financial and technical assistance and the preservation and adaptive use of historic structures and other cultural resources. The alteration of some land uses in and around the park might cause the loss of cultural landscape values and commitment of natural resources that cannot be recovered.

	Alternative 1 — No Action	Alternative 2 — Community Assistance	Alternative 3 — Traditional Park	Alternative 4 – Proposed Action
Relationship between the Local Short-Term Use of the Environment and the Maintenance and Enhancement of Long-term Productivity				There would be some short-term loss of historic fabric due to the effect of weather and limited maintenance on historic structures. In the long term, implementation would contribute to the overall enhancement of regional economic productivity and cultural resource conditions within the park boundaries.
Unavoidable Adverse Impacts				The gradual development of the park would lead to minor to moderate alterations in the character of the area that for some would be a degradation in quality of life.
Energy Requirements and Conservation Potential				Energy requirements would increase for those structures currently unused and unheated that would be acquired, preserved, and adapted for park uses or leased for other uses. New development in and around the park would also result in increased energy use.

COMPLIANCE WITH FEDERAL AND STATE LAWS, EXECUTIVE ORDERS, AND REGULATIONS

The following are the laws, regulations, and policies considered in preparing this *Draft General Management Plan / Environmental Assessment* and may potentially require future compliance in implementing the plan.

NATIONAL ENVIRONMENTAL POLICY ACT OF 1969

This act sets forth the federal policy to preserve important historic, cultural, and natural aspects of our national heritage. It requires federal agencies to use a systematic, interdisciplinary approach that integrates natural and social sciences in planning and decision making that may impact the human environment.

The *Draft General Management Plan / Environmental Assessment* were prepared pursuant to this act and its implementing regulations and guidelines. Implementation of this plan will require ongoing adherence to the National Environmental Policy Act.

SECTION 7 — ENDANGERED SPECIES ACT OF 1973

In compliance with the Endangered Species Act of 1973, as amended, the National Park Service initiated informal consultation with the U.S. Fish and Wildlife Service and the Michigan Department of Natural Resources during the development of this plan. The results of this consultation are in the “Affected Environment” part of this document.

Should the National Park Service propose future actions within the park, it will consult and coordinate with the U.S. Fish and Wildlife Service and the state of Michigan to identify and analyze potential impacts on threatened and endangered species and develop mitigation measures. Formal consultation with the U.S. Fish and Wildlife Service will be requested if it is determined that an NPS action is likely to

adversely affect a threatened or endangered species.

EXECUTIVE ORDERS 11988, “FLOODPLAIN MANAGEMENT,” AND 11990, “WETLANDS”

Environmental documents would be prepared whenever adverse impacts on floodplains or wetlands could be expected from agency actions. Environmental documents would be made available for public review for not less than 60 days before issuing a finding of no significant impact or a notice of intent to prepare an environmental impact statement. When the action would involve adverse impacts on wetland or floodplain areas, the finding of no significant impact or final environmental impact statement would be coupled with a separate statement of findings document.

SECTION 404, CLEAN WATER ACT

The National Park Service will submit applications for section 404 permits to the Army Corps of Engineers when the agency anticipates the need to discharge dredged or fill material into the waters of the United States, including wetlands and waterways.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT OF 1980 (CERCLA)

This law regulates the cleanup of hazardous or toxic contaminants at closed or abandoned sites. In response to this act, the Department of the Interior's policy set forth in 602 DM 2 states “It is Departmental policy to minimize the potential liability of the Department and its bureaus by acquiring real property that is not contaminated unless directed by the Congress, court mandate, or as determined by the Secretary.” This policy requires the acquiring bureau to conduct

preacquisition environmental site assessments (level 1,2, 3 surveys) to determine the nature and extent of contamination.

Consultations with the NPS Hazardous Waste Management and Pollution Prevention Team of the Field Office Technical Support Center have resulted in serious concerns that NPS “acquisition of historic mining sites or exercise of significant management control of these sites may further expose the NPS to liability under CERCLA.”

ARCHITECTURAL BARRIERS ACT OF 1968 (42 USC 4151 ET SEQ.), REHABILITATION ACT OF 1973 (29 USC 701 ET SEQ.) AS AMENDED, THE AMERICANS WITH DISABILITIES ACT OF 1990 (PUBLIC LAW 101-336, 104 STAT. 327), AND THE UNIFORM FEDERAL ACCESSIBILITY STANDARDS

All programs and facilities developed would be as accessible as possible to visitors with disabilities in keeping with the above laws.

EXECUTIVE ORDER 12898 (FEDERAL ACTIONS TO ADDRESS ENVIRONMENTAL JUSTICE IN MINORITY POPULATIONS AND LOW-INCOME POPULATIONS)

This order requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities.

The alternatives addressed in this planning effort were evaluated, and it was determined that none of these actions would result in significant direct or indirect negative or adverse effects on any minority or low-income population or community. See the impacts discussion in the “Environmental Assessment” for further discussion.

No statistically significant minority groups are present. The largest group is a variety of Asian nationals in Michigan Technological University graduate school, and at least the student is relatively functional in English for each family group.

The document will be placed in several libraries and community accessible offices for review. Public meetings will probably be conducted via community access television or distance learning network.

SECTION 106, THE NATIONAL HISTORIC PRESERVATION ACT OF 1966

Section 106 requires federal agencies to take into account the effects of their actions on properties listed on or eligible for listing on the National Register of Historic Places (see table 13) and to give the Advisory Council on Historic Preservation a reasonable opportunity to comment on those actions. Advisory council regulations (36 CFR Part 800) outline procedures and requirements for compliance with section 106, which involve consultation with the state historic preservation officer (SHPO) as well as the advisory council. In keeping with the intent of the law and regulations, and with the NPS servicewide programmatic agreement of 1995, this plan has been developed with the periodic involvement of Michigan's state historic preservation officer, who is also a member of the park's advisory commission. For example, the state historic preservation officer was among the participants in the May 1994 workshop to develop purpose and significance statements. The state historic preservation officer and the advisory council have been kept informed through the park newsletter and the planning briefing booklet, and they have been invited to participate in public meetings. In the September 1995 public meetings, a briefing was held in Lansing that included both the state historic preservation officer and other state officials. SHPO and ACHP comments and advice will continue to be solicited in this and future drafts of this plan.

TABLE 13: GENERAL MANAGEMENT PLAN PROPOSED ACTIONS AND SECTION 106 REQUIREMENTS

Proposed Action and Affected Resource	Potential Effect	Preservation or Mitigating Measures	Further Compliance Needed
Provide cooperating sites and other owners of historic properties technical assistance for preservation and interpretation through long-term and project-specific partnerships.	Effects not yet defined and varying from site to site; they could range from pure advice and joint training to financial assistance for preservation work and interpretive programs.	Ensure that appropriate levels of information about cultural resources are available to support cultural resource treatment decisions and try to ensure that work conforms to the <i>Secretary of the Interior's Standards</i> . Facilitate or prepare historic structure reports and other studies where needed to identify significant cultural resource values and elements and to provide direction for treatment activities and for future management.	SHPO and ACHP consultation and review of NPS involvement in actions that are undertaken for 106 purposes and SHPO and ACHP involvement and advice on development of any formal agreements with sites.
Acquire or lease and rehabilitate structures for adaptive use as visitor orientation centers and office space; meet accessibility standards and health and safety codes.	If structures can be rehabilitated meeting <i>Secretary's Standards</i> , no adverse effect from rehab of structures would be expected. Effects of continued visitor use would be monitored. Associated proposals for any additional parking facilities or other development for visitor access would also have to be based on awareness of archeological, cultural landscape, and other cultural resource values that could be affected.	Historic structure reports would guide rehabilitation and architectural treatment of buildings. Work would conform to the <i>Secretary of the Interior's Standards</i> . Exhibit design plans would be developed. Adaptive use for administrative and visitor use would ensure continued maintenance of structures. Visitor use would be monitored to avoid damage to historic values of the structures. Development concept plans and other planning for any needed developments for visitor access (parking, etc.) might necessitate additional studies to identify landscape, archeological, or ethnographic resources that could be affected so that those values could be protected.	SHPO and ACHP review of historic structure reports, exhibit design plans, and preliminary and final design documents to determine nature of effects and appropriate measures for resource protection and avoidance, in accordance with 36 CFR part 800.

Proposed Action and Affected Resource	Potential Effect	Preservation or Mitigating Measures	Further Compliance Needed
Prepare cultural landscape report, preserve the park's cultural landscapes, and provide interpretive access in the park, where consistent with health, safety, and resource preservation.	<p>Further identification and recognition of important cultural landscape values for purposes of informed management decisions and increased public awareness. Interpretive planning and development would then be based on documentation to avoid potential adverse effects.</p>	<p>Cultural landscape report(s) would guide uses, maintenance, and other management decisions and help preserve significant elements of the landscape.</p> <p>Appropriate archeological investigations would precede any ground-disturbing activities.</p> <p>Visitor use would be managed to avoid damage to the landscapes.</p>	<p>SHPO and ACHP reviews of cultural landscape and archeological reports and proposals and any preliminary design documents.</p>
Study potential boundary expansion at Cliff Mine, Painesdale, and Torch Lake.	Effects are not yet definable, but they are highly unlikely to be adverse.	Any recommended boundary expansion would extend the park's various basic resource preservation and partnership mandates to additional areas.	<p>SHPO and ACHP advice and comment would be sought in the course of boundary studies.</p>
Survey for potential hazardous substances in areas proposed for NPS acquisition.		<p>Potential adverse effects of testing for hazardous substances on archeological and cultural landscape values would need to be considered.</p> <p>Failure to carry out surveys would result in major resources not being considered for NPS acquisition and direct protection.</p>	<p>Potential effects under 36 CFR 800 would be discussed with the state historic preservation office and advisory council.</p>

Proposed Action and Affected Resource	Potential Effect	Preservation or Mitigating Measures	Further Compliance Needed
Provide assistance to local jurisdictions to establish local historic districts and preservation ordinances.	Local review of many private projects to provide for preservation, using the <i>Secretary's Standards</i> as the foundation.	Ordinances would promote both preservation of historic properties and compatible design of new development in the key areas of the park, with possibly more flexible standards in other areas. Additional survey needed to establish historic districts would promote public awareness of the community's historic values.	Probably negotiate a programmatic agreement with the state historic preservation office and advisory council to cover any NPS involvement in design review and project approval under the ordinance.
Establish preservation financial assistance (grants) authorized in park legislation.	Would provide a powerful encouragement for preservation projects by private property owners.	Grant criteria would include <i>Secretary's Standards</i> , and the program would also entail promotional and educational efforts by park staff for local property owners.	Probably negotiate a programmatic agreement with state historic preservation officer and advisory council to cover grant administration.
Assist in preservation of Osceola #13 shaft complex as part of overall community preservation effort.	Would contribute to preservation and public appreciation of more recent copper mining technologies.	HABS/HAER recording project if owner chooses to sell extant machinery.	Would depend on potential effects on any national register and register-eligible properties.
Develop a maintenance facility.	Potential adaptive use of historic structure. See discussion above of historic structure treatments and monitoring use.	See above discussion of need for certain types of information in making decisions about adaptive use.	STATE HISTORIC PRESERVATION OFFICE and ADVISORY COUNCIL review as noted in above discussion of historic structures, consistent with 36 CFR part 800.

CONSULTATION AND COORDINATION

PUBLIC INVOLVEMENT

The National Park Service has provided an ongoing public involvement program to enable the public to participate in the planning process for the Keweenaw National Historical Park *Draft General Management Plan*. The first such opportunity occurred in May 1994 when the park's partners and members of the park's advisory commission participated in a three-day workshop to help develop purpose and significance statements for the park as well as identify the major interpretive stories of the park.

In February 1995 a series of public meetings were held in the Calumet and Houghton/Hancock areas to share with the public the results of the May 1994 workshop and ask the public to share with the planning team their dreams and nightmares and future visions of the park.

The first park planning newsletter was distributed to the public in March 1995 and included the purpose and significance statements, the interpretive themes, and a series of vision statements for the future of the park. That newsletter also included a mail-back response form in which the recipients were asked to respond to a series of questions relating to the contents of the newsletter.

May 1995 saw another series of public workshops. The public was asked to help planners determine what specific park stories should be told and where, and what should be the long-range use and management for the various resources in the park.

The information gleaned from the public in all the above workshops and meetings was used by the planning team to develop alternative concepts for the preliminary *Draft General Management Plan*. In late August/early September 1995, a briefing booklet on the alternative concepts was distributed to the public for review and comment. During the

week of September 12, 1995, a series of public meetings were held in Houghton, Calumet, Marquette, and Lansing to present the preliminary alternative concepts to the general public and to solicit comments. The meetings were well attended and, for the most part, the public was pleased with the five alternatives presented in those meetings.

In February 1996 additional meetings and briefings were conducted in Calumet for members of the advisory commission and the other park partners. During that time, substantial revisions were made to the preliminary draft document, which were reflected in the document provided to the commission and partners in fall 1996.

On December 10 and 11, 1996, representatives of the NPS planning team from the Denver Service Center, the Midwest Field Area in Omaha, Nebraska, and the park met with a variety of individuals to discuss the revised preliminary draft plan. These individuals represented a wide array of the park's partners. Among those in attendance were members of the Quincy Mine Hoist Association, the Calumet national park committee, the Village of Calumet, Calumet Township, and the park's advisory commission; staff representatives of the governor of Michigan, Congressman Bart Stupak, and Senator Carl Levin; and representatives of other park cooperating sites including Coppertown USA, Laurium Manor Inn, Hanka Homestead, the Seamans Mineralogical Museum at Michigan Tech University, the Keweenaw County Historical Society, and Michigan Tech University.

Many of the comments that were presented to the planning team and other NPS representatives were of a technical nature or a request for clarification of certain elements of the revised preliminary draft plan. It was agreed during the meetings to incorporate virtually all of these comments, as presented.

The more substantive comments presented by the respective groups focused on the revised preliminary draft plan's treatment of the issues related to hazardous materials and the subsequent impact the presence of such materials would have on a future NPS acquisition program. The primary concern was that the revised preliminary draft plan and its accompanying NEPA document had overstated the potential seriousness of the hazardous material issues and had presented the information in a very negative manner.

Another major concern was the formal recognition and establishment of a workable partnership arrangement for the park. It was felt that the discussion of a partnership in the revised preliminary draft plan proposed a concept that weakened the authority of the park's advisory commission and treated the other partners as "friends of the park" rather than as partners in the park.

Another concern expressed by both cooperating sites representatives and NPS representatives was the need to formalize the informal arrangements between the National Park Service and the individual cooperating sites.

Decisions at the meetings relative to the three major issues of discussion were as follows:

Hazardous materials issues: The preliminary draft plan will be revised to only state the National Park Service's legal and departmental and agency policy responsibilities relative to this matter. The National Park Service would also work with staff to Congressman Stupak and Senator Levin to revise or delete the more restrictive language in the park's establishing legislation (which currently prohibits acquisition of property that has ever been contaminated).

Redefining the partnership: A new partnership model was discussed and refined during the meetings. That new model is presented in revised preliminary draft plan.

Formalizing the concept of cooperating sites: It was agreed at the meetings that the concept of

cooperating sites was a valid concept, but that the relationship between the cooperating sites and the National Park Service needed to be more structured and formalized. Consequently, the revised preliminary draft plan contains specific criteria to be applied in designating cooperating sites and proposals relative to the establishment of formal cooperative agreements between the National Park Service and the respective sites to clearly define responsibilities and expectations between both parties.

In addition to the above, members of the planning team have participated in each of the park's advisory commission quarterly meetings since the inception of the planning process, as well as meeting, on an informal basis, with other representatives of the park's varied constituencies on numerous occasions.

NPS Attorney/Advisor Shawn Mulligan consulted with U.S. Environmental Protection Agency (Region V) officials and also reviewed EPA administrative records on the Torch Lake NPL site.

This Draft General Management Plan / Environmental Impact Statement is available to the public for review, and public open houses will be held for the public to provide additional comments at that time.

LIST OF AGENCIES AND ORGANIZATIONS WHO RECEIVED COPIES OF THE DRAFT PLAN / ENVIRONMENTAL IMPACT STATEMENT

This document was prepared in consultation with or was distributed to the following agencies and organizations. A complete list may be obtained from park headquarters.

Federal Agencies / Officials

Advisory Council on Historic Preservation
Bureau of Mines, Twin Cities Research Center
Environmental Protection Agency, Region V
Environmental Protection Agency, HSR-6J

Hiawatha National Forest
Natural Resource Conservation Service
Office of the Inspector General
Ottawa National Forest
U.S. Fish and Wildlife Service
 East Lansing Field Supervisor
 Great Lakes Coordinating Office
 Seney National Wildlife Refuge
U.S. Senate
 Hon. Spencer Abraham
 Hon. Carl Levin
U.S. House of Representatives
 Hon. Bart Stupak

State Agencies / Officials

Governor of Michigan
 Hon. Connie Bisfeld, Lieutenant Governor
 of Michigan
 Brian Swift, Governor of Michigan,
 Northern Michigan Representative
 Scott Stangeland, Administrative Assistant,
 Office of the Governor
Historical Society of Michigan
Michigan Department of Environmental
 Quality, Superfund Section
Michigan Department of Natural Resources
 Director
 Deputy Director Region 1
 District Supervisor, Parks
 Planning/Design Branch, Parks
 Wildlife Division
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Ace Hardware
Baraga County Board of Commissioners
Blue Moon Graphics
Bresnan Communications Co.
C-L-K Public Schools
Calumet Library
Calumet Theatre
Calumet Township
Calumet Village Council
Champion–Lake Superior Land Co.
Champion Realty Corp.
City of Houghton
City of Hancock
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Copper Range Historical Museum
Copper World
Coppertown USA Mining Museum
Daily Mining Gazette
Delaware Copper Mine Tours

CONSULTATION AND COORDINATION

- Faith Lutheran Church
Franklin Township
Hancock City Manager
Hancock Public Library
Hancock Township
Hanka Homestead
Houghton County Board of Commissioners
Houghton County Historical Society
Isle Royale Natural History Association
Keweenaw Chamber and Tourism Council
Keweenaw County Board of Commissioners
Keweenaw County Historical Society
Clarence Monette
Keweenaw Bay Indian Community
Keweenaw Heritage Center at St. Anne's Church
Keweenaw Industrial Council
Keweenaw Land Trust
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Keweenaw Video Productions
Laurium Manor Inn
MAC of the Keweenaw
MFC First National Bank
Moyle Construction, Inc.
Munson and Associates
Ontonogian County Board of Commissioners
Ontonogian County Chamber of Commerce
Ontonogian County Economic Development Corporation
Osceola Township
Peninsula Copper Industries, Inc.
Peterson Funeral Home
Pictures Plus
Portage Lake District Library
Quincy Mine Hoist Association
Quincy Township
Schoolcraft Township
Society for the Restoration of Old Victoria
Stillwaters Elder Home
- Strandwood Molding
Superior National Bank
Thurner Bakery
Torch Lake Township
U.P. Engineers and Architects
Upper Peninsula Firefighters' Memorial Museum
Upper Peninsula Power Co.
Upper Peninsula Travel and Recreation Assoc.
Ventures Group
Village of Calumet
Village of Copper City
Village of Lake Linden
Village of Laurium Council
WBKP Television
WCCY/WOLV
WGGL Radio
WLUC TV
WMPL/WZRK
Western Upper Peninsula Planning and Development Region
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- American Lands Conservancy
The American Mining Congress
Chassel Historical Organization
Discovering Michigan
East Thomson Associates
Eastern National Park and Monument Assoc.
Fields Advertising
Flint Journal
Future Media Corp.
George Wright Society
Grand Rapids Press
Great Lakes Camp & Trail Association
Great Lakes Geoscience
IdeaWorks
Institute for the History of Technology and Industrial Archeology
Iron Mountain Iron Mine
Isle Royale Natural History Association
Lake Superior Magazine
Ludington Daily News
Marquette Monthly
Mary Ann Heidemann & Associates
Menominee County Historical Society
Michigan Environmental Council
Michigan Historic Preservation Network

- Michigan Living*
Michigan United Conservation Clubs
Midwest Living Magazine
Milwaukee Foundation
Milwaukee Journal
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The National Mining Hall of Fame and Museum
National Park Foundation
National Parks and Conservation Association
National Trust for Historic Preservation
North Country Bank
Northland College
Northwestern University, Center for Urban
 Affairs and Policy Research
Northwind Books
Oakland Press
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Ottawa National Forest
- People, Land and Water*
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Houghton County Historical Museum

Isle Royale National Park

Keweenaw National Historical Park

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McLain State Park
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Appendices and Selected Bibliography



South end of 5th Street, Calumet, circa 1914.

Photo courtesy of the Michigan Technological University Archives and Copper Country Historical Collections, Roy Drier Collection.

*St. Anne's Catholic Church, Calumet
now housing Keweenaw
Heritage Center, circa 1995.*



Churches in Calumet, circa 1995.



APPENDIX A: HISTORY AND CULTURAL RESOURCES: COPPER ON THE KEWEENAW

Along the spine of the Keweenaw Peninsula is a historic copper mining district where elemental copper occurred in economically recoverable abundance. This is unique among major copper mining areas in the world where copper sulfides or other compounds are the major source of profits. Mining in the Keweenaw changed the United States from a nation dependent on imported copper to a leading producer for the world market. Copper, especially in its electrical applications, was second only to iron among metals critical to American industrialization in the late 19th century.

The story begins in prehistory. Native Americans mined copper on the Keweenaw and Isle Royale beginning probably some 7,000 years ago, and they traded this copper extensively. Copper artifacts found in eastern North America bear witness to the district as the primary source for copper and to the broad trade networks involved. Copper in the hands of groups encountered by the Cabot and Verrazano expeditions, as well as that found at Hopewell sites (in Ohio), may have come from the Keweenaw.¹ These early miners had been succeeded by the Ojibwa when Europeans first arrived at Lake Superior. Nonetheless, reports of masses of pure copper reached the French and British, and some of them set out to establish mines on Lake Superior's southern shores.

These first European mining attempts were short lived, largely because of the need for more sophisticated geological analysis and technologies to locate, extract, and transport ores for a national and world market. The necessary technologies, transportation networks, and capital developed in the 19th century. Perhaps partly because of new restrictions on British copper exports, in 1800 Congress authorized an expedition to the copper areas on Lake Superior.² The expedition never materialized, but continued interest was sparked by later expeditions that involved Lewis Cass, Henry Rowe Schoolcraft, and the future state geologist, Douglass Houghton.

This interest led to a treaty with some of the Ojibwa in 1842-43, which created legal access to copper for non-Indians. In 1843 the federal government set up an office at Copper Harbor to provide mining permits through the Department of War. The next year, U.S. troops built Fort Wilkins, near Copper Harbor, primarily to guard against the possibility of armed clashes between the new miners and Ojibwa bands. The first European-American mining speculation here then began in earnest. As the new miners arrived in increasing numbers, the Ojibwas protested plans to remove them from the area. In 1854 another treaty set up reservations in the region for a number of Ojibwa bands, including those from L'Anse and Ontonagon.

What carried the district past the first fever of speculation in mining claims was the variety of its copper-bearing lodes. Keweenaw copper appears mainly in three types of deposits — amygdaloid, conglomerate, and fissure veins (the latter tended to have some of the region's spectacular masses of pure copper). Although the fissure veins could be rich and sustained the district before the Civil War at locations like the Delaware and Cliff mines, they were also soon exhausted. The most productive and profitable mineral deposits of the region proved to be the amygdaloid and conglomerate lodes, which were in the central portion of the copper range and were exploited beginning in the mid-1850s. From speculative beginnings, the Keweenaw mines made the United States a significant factor in the world copper market and drew the Upper Peninsula of Michigan into the world economy.

From the 1840s to the opening of the Calumet conglomerate lode in the 1860s, the United States produced less than 6% of the world's copper, Michigan accounting for 74.5% of that U.S. total. Between 1867 and 1884, the years following the development of the conglomerate lodes, the United States increased its output to 17% of world copper production, Michigan accounting for 12% of the world total.³ By the mid-1880s the western copper mines had successfully challenged Michigan's

1. David J. Krause, *The Making of a Mining District: Keweenaw Native Copper 1500-1870* (Detroit: Wayne State University Press, 1992), p. 20.

2. *Ibid.*, p. 61.

3. William B. Gates, Jr., *Michigan Copper and Boston Dollars: An Economic History of the Michigan Copper Mining Industry* (Cambridge: Harvard University Press, 1951), pp. 197-200.

overwhelming hegemony. In 1883 Michigan's share of United States copper production dropped — from years in which it stood at 80% and higher to around 50%. Keweenaw production peaked around 1916–17, and production was still substantial until the commodities market crash in 1929, but its contributions to the industry were superseded by the giants of the west like Anaconda in Butte, Montana.⁴

Keweenaw mining companies faced challenges in transporting their product to the world market and in deciding where milling and smelting should take place. Copper Harbor was an early and obvious shipping point. Improvements in Great Lakes shipping routes facilitated shipments to the Erie Canal and New York, and to smelters in Detroit, Cleveland, and Pittsburgh. The ancient Keweenaw portage route was succeeded by the Portage Lake and Lake Superior ship canal, built between 1868 and 1873. Tramways and railroads were also crucial to the movement of rock and mineral concentrates, both at the mines' surface plants and between mines, mills, and smelters. To integrate operations, increase production, and reduce shipping and other costs, a company with enough capital, like Quincy, could build its own mills and smelter facilities.

The technologies and labor required by deep-shaft hard-rock mining meant that, after the earliest boom, only companies that mustered a large capital investment and employed skilled labor would survive. From European mining districts, such as Finnmark, Norway, and especially Cornwall, England, the companies actively solicited skilled laborers. The Keweenaw's non-Indian population was thus diverse from the beginning; it included African-Americans as well as various groups of European-Americans by the time of the 1860 census. Later, as the demand for copper increased, the companies continued to hire immigrant workers, not all of whom came to the United States with mining skills.

As in all major industrial mining areas, people here engaged in a continuing struggle for profits and security. That struggle was shaped by world prices, changing technologies, the needs and expectations of

workers and their families, harsh environmental conditions, the search for high-quality ore, and competition from other mines.

The desire of the larger Keweenaw mining companies, like Calumet and Hecla, to develop a stable workforce had led them to exercise kinds of paternalism not always found in mining camps. For many years, the Keweenaw was relatively peaceful, compared to mining districts in the west, and the companies successfully fought organization of the workers. Like mine owners in the west, they used their influence to shape newspaper coverage, employ spies, and maintain blacklists. When a major strike came, company managers were prepared to resist indefinitely.

In 1913–14, a massive strike forever altered the relationship between labor and management throughout the district. The strike elicited national media attention and hastened the demise of one of the strongest unions in the nation, the Western Federation of Miners (WFM). The strike reflects national patterns in labor–management relations of the era, including widespread strike activity, and aspects of labor relations that were distinctive to the Keweenaw Peninsula.

Local members precipitated the strike despite misgivings of the WFM national board about the adequacy of the union's treasury for this fight with the large and wealthy Michigan companies.⁵ As weeks passed, the mine owners showed no sign of compromise. Congress authorized an investigation, and state and federal governments tried to effect a settlement. Such notables as Mother Jones and Clarence Darrow came to the district to support the striking workers.

By the time the strike ended in a victory for the owners, the Western Federation of Miners had so depleted its financial resources in support of the Michigan strike that it no longer remained a viable union for its western members. Although it reorganized two years later as the International Union of Mine, Mill and Smelter Workers, the organization never regained its former vigor.

4. James Douglas, "The Copper-Resources of the United States," *Transactions of the American Institute of Mining Engineers* XIX (1891): 700; Michael P. Malone, *The Battle for Butte: Mining and Politics on the Northern Frontier, 1864–1900* (Seattle: University of Washington Press, 1981), p. 36.

5. Larry Lankton, *Cradle to Grave: Life, Work, and Death at the Lake Superior Copper Mines* (New York: Oxford University Press, 1991), pp. 221–22.

Despite the end of the strike and their technological investments, many Keweenaw companies increasingly struggled to operate profitably — even after the temporary stimulus of rising copper prices during World War I. Facing competition from newer mines in Canada, Chile, and South America, some of the Keweenaw companies consolidated, and they sought technologies to increase productivity, reduce labor costs, and reclaim stamp sands. Remaining equipment and sites along Torch Lake testify to their reclamation efforts.

The numbers of workers in the industry fell. The Great Depression of the 1930s further depressed copper prices. Keweenaw communities, long dominated by a single industry, “had virtually no buffer against economic calamity” when faced with the resulting loss of jobs.⁶ Despite an increase in activity during World War II, the post-war period saw more mine closings in the region and emphasis by Quincy and C & H on reclamation and diversification.

Some 400 copper mining companies operated in the Keweenaw copper district between 1872 and 1920. Of those, the C & H Mining Company represented the greatest production, technological development, and influence in Michigan copper mining and, for the period 1867–82, for the nation’s copper industry. The Quincy Mining Company, established in the 1840s, had the greatest longevity and in some years it was second only to the C & H Mining Company in production.⁷ Both companies continued in existence into the 1960s.

QUINCY MINING COMPANY (1846–1967)

Of the numerous mining ventures spawned by the nation’s first big copper boom, the Quincy Mining Company alone survived through the district’s entire history. It was among the early companies to exploit amygdaloid beds. The company earned the title “Old Reliable” because, with a single two-year gap at the end of the Civil War, it paid dividends for every year

from 1862 to 1920.⁸ It was able to continue mining during economically difficult times when many others, except the giant C & H Mining Company, had shut down.

Between 1862 and 1868 Quincy ranked first nationally in copper production, supplying raw material for brass buttons, copper canteens, bronze cannon, and naval equipment, especially copper sheathing for vessels. When the Civil War began in 1861, Michigan was producing 89.5% of United States copper, the Quincy mine accounting for 56% of that figure.⁹ By 1865 Quincy was producing five times more copper than the largest-producing fissure mine. Although after 1868 Quincy could not match C & H’s output, it was among the closest of the Keweenaw rivals.

The Quincy Mining Company was a leader in the use of mining technology. In the 1860s Quincy was among the companies that replaced ladders with man-engines. Shortly after the Civil War, the company, like several others, began the use of power drills and was soon investing heavily in drill technology.¹⁰ Quincy was the first Keweenaw mine to use mechanized tramping to any significant extent.¹¹ By 1901 the company began experimenting with electric haulage and soon had a stable of 15 electric locomotives in operation on the main drifts, each pulling three to four cars — with a resulting increase in production. Quincy’s engineering department added to the benefits of mechanized hauling by developing patented automatic side-dumping cars to eliminate the time and effort spent in uncoupling and turning the tramcars.¹²

Raising the rock from underground depended upon the hoisting equipment. In this area, too, Quincy led the industry with some of the largest steam engines in the United States. In 1894 Quincy purchased a 2,500 horsepower hoist from E. P. Allis & Company of

8. Lankton, *Cradle to Grave*, p. 17; Larry D. Lankton and Charles K. Hyde, *Old Reliable: An Illustrated History of the Quincy Mining Company* (Hancock, Michigan: Quincy Mine Hoist Association, Inc., 1982), pp. 17–18.

9. Gates, *Michigan Copper and Boston Dollars*, p. 13.

10. Lankton, *Cradle to Grave*, pp. 82–83.

11. *Ibid.*, pp. 32, 101.

12. Lankton and Hyde, *Old Reliable*, p. 112.

6. *Ibid.*, p. 252.

7. Douglas, “Copper-Resources of the United States,” p. 702.

Milwaukee. The duplex cylinder engine, the biggest Allis had ever built, raised skips at 2,500 to 3,000 feet per minute.¹³ In 1917 Quincy ordered its largest compound, condensing hoist from the Nordberg Manufacturing Company. The hoist, which operated at 3,200 feet per minute and could lift 10 tons of copper rock per trip, was the largest steam hoisting engine in the world.¹⁴ The engine remains in the #2 hoist house, which was constructed to house it.

One mark of the company's growth in the 1890s was the construction of the Quincy Smelting Works in 1898. Many mining companies contracted with independent smelting companies to process their ore — the expense of erecting and operating such a plant usually being too large to justify. Quincy's output at the turn of the century warranted such a facility, which was erected on Portage Lake at the foot of Quincy Hill. The Quincy Smelting Works may be the best preserved smelter in the world that reflects technologies of the late 19th and early 20th centuries.

The size of the Quincy workforce, always responsive to market forces, grew dramatically during the 1890s. It also reflected fundamental changes in immigration to the Keweenaw. At Quincy, the mine workers and associated communities until the mid-1880s largely reflected the earliest groups of immigrants to the district: Cornish, Irish, German, a few Scandinavians, and French-Canadians who mostly worked as loggers and timbermen.¹⁵ The 1880s and 1890s saw other immigrant groups arrive in larger numbers. The Quincy Mining Company recruited Finns from the copper mines of the Finnmark province of Norway. By 1905 Quincy had 1,714 workers at the mines and stamp mills, with another 120 at the smelter. Half of the foreign-born workers hired by Quincy between 1890 and 1900 were from Finland, and sizeable groups from Italy and the Austrian empire were also among the recent immigrants.¹⁶

These ethnic groups lived in neighborhoods in company housing or in nearby Hancock, which was largely platted by the Quincy Mining Company. Churches, meeting halls, and benevolent societies reflected the cohesion of those groups. The

company's paternalism was exemplified by support for churches and the provision of housing and medical services (for which the workers paid). This was part of a business strategy to attract and keep a relatively stable workforce. By the turn of the century, though, the growth of the community and its increasingly polyglot nature had altered labor-management relations and community building.

The Cornish remained a dominant group through the 19th century, many mining practices being virtually transplanted from the copper and tin mines of Cornwall. The experience of Finns and Italians at Quincy typified the experience of latecomers throughout the district: they were hired for the most laborious and low-paying jobs, and the job hierarchy took on ethnic dimensions. This had a direct bearing on the deteriorating labor relations which led to the Michigan copper district strike of 1913–14.

When the strike began on July 23, 1913, Quincy's underground workers joined thousands of others throughout the Michigan district. Quincy responded to the shutdown with evictions and by importing 1,200 strikebreakers. Ultimately, the strikers succumbed to the uncompromising companies and the waning financial support of the Western Federation of Miners.

Victory in the strike, however, did not ensure the company's survival in the copper market of the 1920s. The demand for copper during World War I temporarily enabled the company to improve its position within the industry. However, extracting copper ore at a reasonable cost became increasingly difficult. During the 1920s the company increased the depth of its mines and mechanized more of the operations. By 1931 the Quincy shaft #2 reached a depth of more than 9,000 feet — the deepest mine in the United States.

Falling copper prices during the Great Depression closed down operations until the company geared up again in 1937 in response to rising copper prices just before and during World War II. By 1943 Quincy opened a reclamation plant to process ore from the mill stamp sands as a supplement to waning mine productivity. Mining operations essentially ceased in 1957, although the reclamation plant continued to produce copper for another 10 years.

13. *Ibid.*, p. 64.

14. *Ibid.*, pp. 115–20.

15. *Ibid.*, p. 85.

16. *Ibid.*, pp. 84–85.

C & H MINING COMPANY (1866–1968)

The discovery and extraction of the rich Calumet conglomerate lode were the most important development in both Michigan and U.S. copper mining between 1867 and the early 1880s. During these years the U.S. percentage of world copper production increased from 6% to 17%. In 1870, when Michigan produced 87% of the new copper in the United States, the Calumet and the Hecla mines contributed more than half of the state's total.¹⁷ In 1882 Calumet & Hecla accounted for a high percentage of the total U.S. production of copper, and even in 1900, its production was surpassed only by Anaconda among American mining companies.¹⁸ Although the Boston-based company was outdone by western companies, early 20th century consolidation and diversification enabled C & H to contend with the large western companies. From 1880 to 1900 C & H dividends totaled \$57 million.¹⁹

C & H's high production figures and financial success reflect the technological and industrial developments that made possible the successful exploitation of the conglomerate lode. C & H quickly assumed leadership, developing methods to mine efficiently at great depths and the technology to exploit deposits that previously had little economic value, as well as to increase productivity in existing lodes.

C & H invested heavily in an impressive array of steam-powered technology. In 1881, sixteen stationary steam engines powered machinery at the mine site. By the late 1890s, some 50 steam engines were in service at the mine, with additional engines at its mills and smelter.²⁰ The commissioner of mineral statistics reported in 1899 that C & H produced "as much power as is now being generated by the great electric plant at Niagara Falls, and about equal to the

power used in an average manufacturing city of 200,000 people."²¹

To support its mining operations, C & H built a large and efficient surface plant. Along with facilities necessary for receiving copper rock, giving it a preliminary break, and shipping it to the stamp mill, the surface plant also included a host of shops able to supply virtually all the mine's maintenance and repair work. The company deliberately built with the intention that the plant standing at the mine in 1900 would serve until the conglomerate lode was exhausted, which the company estimated at 75–100 years later. In addition, the company operated two stamp mills, two smelters, and a railroad.

As significant to the company's success as its industrial development was C & H's management of its workers. The size and scale of the C & H industrial community make it an example of corporate-sponsored community planning and paternalism in the United States. Ultimately, the company's paternalism and determination to prevent union organization contributed to the rise of labor agitation on a scale previously unknown to the copper country, culminating in the strike of 1913–14.

Immigrant labor within a stratified workforce helped make C & H's immense profits possible. Lower wages gave the company an advantage over western rivals, who, at least initially and generally, had to face the demands of a predominantly single, male workforce that was highly conscious of opportunities to move on. C & H deliberately sought family men whose ties and obligations would make them, in the company's expectation, less likely to leave the district, stable, compliant, and dependable. To this end, C & H developed paternal and welfare programs that encouraged dependency, provided varying degrees of control over the activities of employees, helped justify lower wages, and created real benefits to families.

A key element was adequate, low-cost housing with additional services, such as garbage collection and repair work, free of charge. By 1898 C & H owned some 1,000 dwellings, and about 800 employee-built houses stood on company land. The company's fire department served the communities as well as the

17. Lankton, *Cradle to Grave*, p. 20.

18. Gates, *Michigan Copper and Boston Dollars*, pp. 197–200; Horace J. Stevens, *The World's Copper Statistics* (Houghton, Michigan: Horace J. Stevens, 1902), p. 13.

19. Gates, *Michigan Copper and Boston Dollars*, pp. 216–22.

20. Lankton, *Cradle to Grave*, pp. 44–46.

21. Michigan Commissioner of Mineral Statistics, *Mines and Mineral Statistics for 1899* (Lansing, Michigan), p. 276.

mines, and its waterworks pumped water to employee houses.

C & H provided more than housing. The company built 20 schools, a public library stocked with 50,000 volumes in a score of languages, community bath and shower facilities, and a swimming pool. For monthly fees, workers received medical services and medicines; in 1898 the company built a hospital with laboratory and surgical equipment.²² Less visibly, C & H paternalism reached out into other important spheres of community life: donations were made for the construction of churches for the various ethnic groups, and several newspaper editors received mining company money. Company executives held influential positions in the village, township, and country governments.

The ethnic population of Calumet Township (including the mine location and the adjacent villages of Red Jacket and Laurium) reflected national trends in immigration of the late 19th century. The role of the more recent arrivals, especially the Finns and Italians, in the strike of 1913–14 was discussed above. This social hierarchy was at work at C & H, but on a larger scale. Because Red Jacket, the original industrial community related to the mines, was immediately adjacent to the shafts, the situation there was particularly close. Churches, social halls, bars, and houses were clustered within a few blocks of the mines. Within this tight web, a dozen distinct ethnic groups delineated their social boundaries.

The community that grew up around the C & H mines has been described as the Calumet “ethnic conglomerate.” In 1870 the township’s population was 3,182; of these, 2,051 were born in other countries.²³ Many of Calumet’s institutions were influenced by Cornishmen, who had arrived with the 1840s copper rush. With passing years, non-English-speaking immigrants came to outnumber native English speakers. As at Quincy, Irish, Scots, Germans, and French-Canadians were the predominant early groups, along with the Cornish.

By the 1870s Swedes, Norwegians, and Italians were present in significant numbers. The 1880s brought sizeable Polish, Slovenian, and Croatian groups, and a large influx of Finns. In 1903 Calumet had eight foreign language newspapers; five of them were Finnish. In 1907 local priests counted 13,141 Roman Catholics in Calumet, divided among six parishes; all but one of these churches had single-nationality congregations.²⁴ Germans, Swedes, Finns, and Norwegians of the Lutheran faith also had separate churches. The architecture, neighborhoods, surnames, foods, and traditions in Calumet today continue to express the heritage of this ethnic conglomerate.

After World War I, C & H emphasized consolidation, mill sand reclamation, and diversification. In 1923 the C & H Mining Company reincorporated, consolidating its by now numerous mining properties. From this point until the mines closed permanently in 1968, company efforts were focused on capturing larger quantities of copper in the milling and smelting process, extracting ore from rock in the new mines, and reclaiming copper from the mill sands. Eventually the company branched out into the production of nonferrous tubing and copper chemicals.

In the end, Michigan’s copper mines left behind communities that share a rich heritage of mining and mining technology, immigration and community-building, corporate paternalism, and labor organization. Congress established the Keweenaw National Historical Park to protect evidence of this chapter in the nation’s history of society, commerce, and industry, and to play a leading role in increasing public understanding of America’s mining, industrial, labor, corporate, and ethnic heritage.

22. Annual Report of the C & H Mining Co., 1898-1899, 1914; Claude T. Rice, “Labor Conditions and Calumet and Hecla,” *Engineering and Mining Journal* (December 3, 1911), pp. 1235-38.

23. Arthur W. Thurner, *Calumet Copper and People: History of a Michigan Mining Community, 1864-1970* (Hancock, Michigan, 1974), p. 13.

24. *Ibid.*, p. 23.

APPENDIX B: LEGISLATION

PUBLIC LAW 102-543—OCT. 27, 1992

106 STAT. 3569

Public Law 102-543
102d Congress

An Act

To establish the Keweenaw National Historical Park, and for other purposes.

Oct. 27, 1992
[S. 1664]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Michigan.
Conservation.
16 USC 410yy.

SECTION 1. FINDINGS AND PURPOSES.

(a) FINDINGS.—The Congress finds that—

(1) The oldest and largest lava flow known on Earth is located on the Keweenaw Peninsula of Michigan. This volcanic activity produced the only place on Earth where large scale economically recoverable 97 percent pure native copper is found.

(2) The Keweenaw Peninsula is the only site in the country where prehistoric, aboriginal mining of copper occurred. Artifacts made from this copper by these ancient Indians were traded as far south as present day Alabama.

(3) Copper mining on the Keweenaw Peninsula pioneered deep shaft, hard rock mining, milling, and smelting techniques and advancements in related mining technologies later used throughout the world.

(4) Michigan Technological University, located in the copper district, was established in 1885 to supply the great demand for new technologies and trained engineers requested by the area's mining operations. Michigan Technological University possesses a wealth of both written and photographic historic documentation of the mining era in its archives.

(5) Michigan's copper country became a principal magnet to European immigrants during the mid-1800's and the cultural heritage of these varied nationalities is still preserved in this remarkable ethnic conglomerate.

(6) The corporate-sponsored community planning in Calumet, Michigan, as evidenced in the architecture, municipal design, surnames, foods, and traditions, and the large scale corporate paternalism was unprecedented in American industry and continues to express the heritage of the district.

(7) The entire picture of copper mining on Michigan's Keweenaw Peninsula is best represented by three components: the Village of Calumet, the former Calumet and Hecla Mining Company properties (including the Osceola #13 mine complex), and the former Quincy Mining Company properties. The Village of Calumet best represents the social, ethnic, and commercial themes. Extant Calumet and Hecla buildings best depict corporate paternalism and power, and the themes of extraction and processing are best represented by extant structures of the Quincy Mining Company.

(8) The Secretary of the Interior has designated two National Historic Landmark Districts in the proposed park area, the Calumet National Historic Landmark District and the Quincy Mining Company National Historic Landmark District.

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(b) PURPOSES.—The purposes of this Act are—

- (1) to preserve the nationally significant historical and cultural sites, structures, and districts of a portion of the Keweenaw Peninsula in the State of Michigan for the education, benefit, and inspiration of present and future generations; and
- (2) to interpret the historic synergism between the geological, aboriginal, sociological, cultural technological, and corporate forces that relate the story of copper on the Keweenaw Peninsula.

16 USC 410yy-1. SEC. 2. DEFINITIONS.

As used in this Act, the term—

- (1) “Commission” means the Keweenaw Historic Preservation Advisory Commission established by section 9.
- (2) “park” means the Keweenaw National Historical Park established by section 3(a)(1).
- (3) “Secretary” means the Secretary of the Interior.

16 USC 410yy-2. SEC. 3. ESTABLISHMENT AND ADMINISTRATION OF PARK.

(a) ESTABLISHMENT AND ADMINISTRATION.—(1) There is hereby established as a unit of the National Park System the Keweenaw National Historical Park in and near Calumet and Hancock, Michigan.

(2) The Secretary shall administer the park in accordance with the provisions of this Act, and the provisions of law generally applicable to units of the National Park System, including the Act entitled “An Act to establish a National Park Service, and for other purposes”, approved August 25, 1916 (16 U.S.C. 1, 2-4), and the Act entitled “An Act to provide for the preservation of historic American sites, buildings, objects and antiquities of national significance, and for other purposes”, approved August 21, 1935 (16 U.S.C. 461 et seq.).

(b) BOUNDARIES AND MAP.—(1) The boundaries of the park shall be as generally depicted on the map entitled “Keweenaw National Historical Park, Michigan”, numbered NHP-KP/20012-B and dated June, 1992. Such map shall be on file and available for public inspection in the office of the National Park Service, Department of the Interior, Washington, District of Columbia, and the office of the village council, Calumet, Michigan.

(2) Within 180 days after the date of enactment of this Act, the Secretary shall publish in the Federal Register a detailed description and map of the boundaries established under paragraph (a)(1).

16 USC 410yy-3. SEC. 4. ACQUISITION OF PROPERTY.

(a) IN GENERAL.—Subject to subsections (b) and (c), the Secretary is authorized to acquire lands, or interests therein, within the boundaries of the park by donation, purchase with donated or appropriated funds, exchange, or transfer.

(b) STATE PROPERTY.—Property owned by the State of Michigan or any political subdivision of the State may be acquired only by donation.

(c) CONSENT.—No lands or interests therein within the boundaries of the park may be acquired without the consent of the owner, unless the Secretary determines that the land is being developed, or is proposed to be developed in a manner which is detrimental to the natural, scenic, historic, and other values for which the park is established.

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publication.

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(d) HAZARDOUS SUBSTANCES.—The Secretary shall not acquire any lands pursuant to this Act if the Secretary determines that such lands, or any portion thereof, have become contaminated with hazardous substances (as defined in the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. 9601)).

SEC. 5. COOPERATION BY FEDERAL AGENCIES.

16 USC 410yy-4.

(a) Any Federal entity conducting or supporting activities directly affecting the park shall—

(1) consult, cooperate, and, to the maximum extent practicable, coordinate its activities with the Secretary and the Commission;

(2) conduct or support such activities in a manner that—

(A) to the maximum extent practicable, is consistent with the standards and criteria established pursuant to the general management plan developed pursuant to section 6; and

(B) will not have an adverse effect on the resources of the park; and

(3) provide for full public participation in order to consider the views of all interested parties.

SEC. 6. GENERAL MANAGEMENT PLAN.

16 USC 410yy-5.

Not later than 3 fiscal years after the date of enactment of this Act, the Secretary shall prepare, in consultation with the Commission, and submit to Congress a general management plan for the park containing the information described in section 12(b) of the Act of August 18, 1970 (16 U.S.C. 1a-7(b)). Such plan shall interpret the technological and social history of the area, and the industrial complexes of the Calumet and Hecla, and Quincy Mining Companies, with equal emphasis.

SEC. 7. COOPERATIVE AGREEMENTS.

16 USC 410yy-6.

The Secretary, after consultation with the Commission, may enter into cooperative agreements with owners of property within the park of nationally significant historic or other cultural resources in order to provide for interpretive exhibits or programs. Such agreements shall provide, whenever appropriate, that—

(1) the public may have access to such property at specified, reasonable times for purposes of viewing such property or exhibits, or attending the programs established by the Secretary under this subsection; and

(2) the Secretary, with the agreement of the property owner, may make such minor improvements to such property as the Secretary deems necessary to enhance the public use and enjoyment of such property, exhibits, and programs.

SEC. 8. FINANCIAL AND TECHNICAL ASSISTANCE.

16 USC 410yy-7.

(a) IN GENERAL.—The Secretary may provide to any owner of property within the park containing nationally significant historic or cultural resources, in accordance with cooperative agreements or grant agreements, as appropriate, such financial and technical assistance to mark, interpret, and restore non-Federal properties within the park as the Secretary determines appropriate to carry out the purposes of this Act, provided that—

(1) the Secretary, acting through the National Park Service, shall have right of access at reasonable times to public portions of the property covered by such agreement for the purpose

of conducting visitors through such properties and interpreting them to the public; and

(2) no changes or alterations shall be made in such properties except by mutual agreement between the Secretary and the other parties to the agreements.

(b) MATCHING FUNDS.—Funds authorized to be appropriated to the Secretary for the purposes of this section shall be expended in the ratio of \$1 of Federal funds for each \$4 of funds contributed by non-Federal sources. For the purposes of this subsection, the Secretary is authorized to accept from non-Federal sources, and to utilize for purposes of this Act, any money so contributed. Donations of land, or interests in land, by the State of Michigan may be considered as a contribution from non-Federal sources for the purposes of this subsection.

16 USC 410yy-8. SEC. 9. KEWEENAW NATIONAL HISTORICAL PARK ADVISORY COMMISSION.

(a) ESTABLISHMENT AND DUTIES.—There is established the Keweenaw National Historical Park Advisory Commission. The Commission shall—

(1) advise the Secretary in the preparation and implementation of a general management plan described in section 6;

(2) advise the Secretary on the development of and priorities for implementing standards and criteria by which the Secretary, pursuant to agreements referred to in sections 7 and 8, will provide financial as well as technical assistance to owners of non-Federal properties within the park;

(3) advise the Secretary on the development of rules governing the disbursal of funds for the development of non-Federal properties;

(4) advise the Secretary with respect to the selection of sites for interpretation and preservation by means of cooperative agreements pursuant to section 7;

(5) assist the Secretary in developing policies and programs for the conservation and protection of the scenic, historical, cultural, natural and technological values of the park which would complement the purposes of this Act;

(6) assist the Secretary in coordinating with local governments and the State of Michigan the implementation of the general management plan, and furthering the purposes of this Act;

(7) be authorized to carry out historical, educational, or cultural programs which encourage or enhance appreciation of the historic resources in the park, surrounding areas, and on the Keweenaw Peninsula; and

(8) be authorized to seek, accept, and dispose of gifts, bequests, or donations of money, personal property, or services, received from any source, consistent with the purposes of this Act and the park management.

(b)(1) The Commission may acquire real property, or interests in real property, to further the purposes of the Act by gift or devise; or, by purchase from a willing seller with money which was given or bequeathed to the Commission on the condition that such money would be used to purchase real property, or interests in real property, to further the purposes of this Act.

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(2) For the purposes of section 170(c) of the Internal Revenue Code of 1986, any gift to the Commission shall be deemed to be a gift to the United States.

(3) Any real property or interest in real property acquired by the Commission shall be conveyed by the Commission to the National Park Service or the appropriate public agency as soon as possible after such acquisition, without consideration, and on the condition that the real property or interest in real property so conveyed is used for public purposes.

Real property.

(4) The value of funds or property, or interests in property, conveyed to the National Park Service by the Commission may be considered as non-Federal, at the Commission's discretion.

(c) MEMBERSHIP.—

(1) COMPOSITION.—The Commission shall be composed of seven members appointed by the Secretary, of whom—

(A) two members shall be appointed from nominees submitted by the Calumet Village Council and the Calumet Township Board;

(B) one member shall be appointed from nominees submitted by the Quincy Township Board and the Franklin Township Board;

(C) one member shall be appointed from nominees submitted by the Houghton County Board of Commissioners;

(D) one member shall be appointed from nominees submitted by the Governor of the State of Michigan; and,

(E) two members who are qualified to serve on the Commission because of their familiarity with National Parks and historic preservation.

(2) CHAIRPERSON.—The chairperson of the Commission shall be elected by the members to serve a term of 3 years.

(3) VACANCIES.—A vacancy on the Commission shall be filled in the same manner in which the original appointment was made.

(4) TERMS OF SERVICE.—

(A) IN GENERAL.—Each member shall be appointed for a term of 3 years and may be reappointed not more than three times.

(B) INITIAL MEMBERS.—Of the members first appointed under subsection (b)(1), the Secretary shall appoint—

(i) two members for a term of 1 year;

(ii) two members for a term of 2 years; and

(iii) three members for a term of 3 years.

(5) EXTENDED SERVICE.—A member may serve after the expiration of that member's term until a successor has taken office.

(6) MEETINGS.—The Commission shall meet at least quarterly at the call of the chairperson or a majority of the members of the Commission.

(7) QUORUM.—Five members shall constitute a quorum.

(d) COMPENSATION.—Members shall serve without pay. Members who are full-time officers or employees of the United States, the State of Michigan, or any political subdivision thereof shall receive no additional pay on account of their service on the Commission.

(e) TRAVEL EXPENSES.—While away from their homes or regular places of business in the performance of services for the Commis-

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sion, members shall be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in the Government service are allowed expenses under section 5703 of title 5, United States Code.

(f) MAIls.—The Commission may use the United States mails in the same manner and under the same conditions as other departments and agencies of the United States.

(g) STAFF.—The Commission may appoint and fix the pay of such personnel as the Commission deems desirable. The Secretary may provide the Commission with such staff and technical assistance as the Secretary, after consultation with the Commission, considers appropriate to enable the Commission to carry out its duties, on a cost reimbursable basis. Upon request of the Secretary, any Federal agency may provide information, personnel, property, and services on a reimbursable basis, to the Commission to assist in carrying out its duties under this section. The Secretary may accept the services of personnel detailed from the State of Michigan or any political subdivision of the State and reimburse the State or such political subdivision for such services. The Commission may procure additional temporary and intermittent services under section 3109(b) of title 5 of the United States Code, with funds obtained under section 9(a)(6), or as provided by the Secretary.

(h) HEARINGS.—The Commission may, for the purpose of carrying out this Act, hold such hearings, sit and act at such times and places, take such testimony, and receive such evidence, as the Commission considers appropriate. The Commission may not issue subpoenas or exercise any subpoena authority.

16 USC 410yy-9.

SEC. 10. AUTHORIZATION OF APPROPRIATIONS.

(a) Except as provided in subsection (b), there are authorized to be appropriated such sums as may be necessary to carry out this Act, but not to exceed \$5,000,000 for the acquisition of lands and interests therein, \$25,000,000 for development, and \$3,000,000 for financial and technical assistance to owners of non-Federal property as provided in section 8.

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(b) There are authorized to be appropriated annually to the Commission to carry out its duties under this Act, \$100,000 except that the Federal contribution to the Commission shall not exceed 50 percent of the annual costs to the Commission in carrying out those duties.

Approved October 27, 1992.

LEGISLATIVE HISTORY—S. 1664:

SENATE REPORTS: No. 102-480 (Comm. on Energy and Natural Resources).
CONGRESSIONAL RECORD, Vol. 138 (1992):

Oct. 1, considered and passed Senate.
Oct. 5, considered and passed House.

WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS, Vol. 28 (1992):
Oct. 27, Presidential statement.

APPENDIX C: COOPERATING SITES

There are a number of governmentally and privately operated attractions that are cooperating with the National Park Service to tell the stories of the Keweenaw (see below). These sites are ready for visitors and contribute much to the visitor experience in the Keweenaw Peninsula. When the national historical park was first established, the National Park Service believed it was a good idea to enter into cooperative agreements with these sites to provide those elements of the copper mining story not readily available in either the Quincy or Calumet units of the park. Through these cooperative agreements and other kinds of programmatic activities, these sites will continue to cooperate with the National Park Service and help provide the visitor experience referenced above. These cooperating sites are:

A. E. Seaman Mineralogical Museum

Here visitors can learn about the geological forces that produced the most extensive concentration of pure native copper in the world and see the finest display of minerals from the Lake Superior Copper District.

Copper Range Historical Museum

The museum, in the village of South Range, tells the stories of the Copper Range Mining Company and its workers. The nearby community of Painesdale is one of the best preserved company towns in the Keweenaw.

Delaware Copper Mine

One of the oldest mines on the Keweenaw, the Delaware was one of the few successful “mass” or “fissure” mines. Eventually, mining companies exploited the extraordinarily rich ores for their wealth, but initially the mining of the naturally refined mass copper was thought to be the direction to take. The mine offers a number of underground and surface tours.

F. J. McLain State Park

Since ancient times, travelers have used a shortcut across the Keweenaw Peninsula — up Portage River and across Portage Lake to short, low portage at the north side. To the Ojibway, this was the “keweenaw.” As modern mining developed in the mid-19th century, a canal was dug along the portage route and Portage Lake was born, providing ready access for copper to be shipped to markets around the world. The park sits at the north end of this canal. It also provides shoreline access to Lake Superior and has a modern campground.

Fort Wilkins State Park

Built in 1844 to provide some semblance of order on the Keweenaw frontier, Ft. Wilkins is a well preserved example of a 19th century military post. It offers a chance to explore the daily routine of service and hardship through a number of restored buildings, museum exhibits, and costumed interpreters.

Hanka Homestead

A goal of many Finnish immigrants to the Keweenaw was to work in the mines until they could afford to buy or homestead their own small, self-sufficient farm. The Hanka Homestead preserves just such a small farm, largely unaltered since the beginning of the century.

Historic Calumet (in Calumet Unit)

A village rich with history and architecture, Calumet is one of the main focal points of the new park. At the height of the mining period, Calumet buzzed with commerce and a rich mix of immigrant groups. Red Jacket, as it was originally called, was developed on land provided by the C & H Mining Company. The commercial architecture of the village, along with the architecture of the C & H industrial core, provide a fitting reminder of this busy time. The **Coppertown USA Mining Museum** offers an excellent overview of the C & H story. Tours and a variety of live performances are available at the **Calumet Theatre**. Tours are available at the **Upper Peninsula**

Firefighters' Memorial Museum, and The Keweenaw Heritage Center at St. Anne's Church.

Houghton County Historical Museum

The museum, in the former mill office of the C & H Mining Company, offers an extensive glimpse into the daily life of Houghton County's past.

Keweenaw County Historical Museum

Shipping on Lake Superior was the lifeline of the Keweenaw in the early years. Here visitors can learn about the ships and tour one of the lighthouses they depended upon. Eagle Harbor was one of the first ports developed on the Keweenaw.

Laurium Manor Tours

Laurium Manor was the largest and most opulent mansion in the western Upper Peninsula. Begun in 1906 and finished in 1908, Laurium was built by Captain Thomas H. Hoatson, Jr. whose father became the superintendent of the Calumet and Hecla Mining company in 1872. In 1878 Hoatson Jr. began working for the Calumet and Hecla Mining company and was later instrumental in organizing the Calumet and Arizona Mining Company in 1899. He was also the director of the First National Bank of Calumet, 2nd vice-president of the Keweenaw Copper Company, vice-president of the Keweenaw Central Railroad, vice-president of the Superior and Pittsburgh Copper Mining company in Arizona, and vice-president of the Hancock Consolidated Mining Company of Hancock. Also during his lifetime, Hoatson was the owner, director, or vice-president of numerous other mining, banking, and railroad

companies as well. Although Hoatson died in 1929, his wife continued to live here until the mid-1930s.

The manor represents the lifestyle common to the wealthy mine owners on the Keweenaw at the turn of the century. The 13,000 square foot mansion has 45 rooms. The mansion is in Laurium Village, adjacent to Calumet, and tours are available daily during the summer and self-guided tour during the winter.

Old Victoria

The Old Victoria restoration preserves a series of small log houses built to accommodate early miners. Its isolated setting still gives a strong sense of the conditions faced by miners and their families in the rugged land that is Michigan's Upper Peninsula.

Porcupine Mountains Wilderness State Park

Michigan's largest state park contains numerous early historic mining sites; virgin forest offers a glimpse of conditions known by the prehistoric native North Americans, the voyageurs, and early European-American miners.

Quincy Mine Hoist and Underground Mine

The Quincy Mining Company was one of the first commercially successful mines and had one of the longest operating periods. The Quincy #2 shaft eventually descended over 9,000 feet into the ground, and was served by the largest steam hoist ever built. Tours of the steam hoist, the surface area, and underground mining areas are available. A surface-running tram car system, linking the hoist area with the mine entrance, is scheduled for operation by 1997.

APPENDIX D: PRIMARY AND SECONDARY INTERPRETIVE THEMES AND SUPPORTING STORIES

Primary interpretive themes describe those ideas about a site that are so important we want all visitors to that site to understand them. Based on the area's purpose and significance statements, themes provide guidelines for making decisions concerning which interpretive stories will be told to visitors and what interpretive facilities will be required to tell those stories. The following themes and stories related to Keweenaw's Copper Country were developed during many community workshops held on the Keweenaw Peninsula and through several public review opportunities.

People's Lives

The rich copper resources of the Keweenaw Peninsula have had a long and profound effect on the lives of area residents.

Copper excavated on the Keweenaw 7,000 years ago generated several prehistoric trading societies in which copper significantly affected beliefs and social and economic life in most of what is now the eastern United States.

The copper industry created a social and economic hierarchy that provided wealth for some and jobs for others.

Life on the Keweenaw has created a sense of community — attachment to the land and the people — that keep residents in the area or draw them back if they leave.

Copper Country miners and their families often led hard and difficult lives.

Copper miners had a difficult, strenuous, and dangerous occupation that came with environmental and human costs. Extracting copper resulted in the average of the death of one man a week in the mines circa 1890–1910.

The remoteness and harshness of the Keweenaw environment demanded many adaptations by people and companies to survive and thrive.

As mining communities modernized, important transformation in transportation, commerce, culture, and entertainment affected residents' lives.

Age, gender, and physical ability influenced the way people experienced the Keweenaw Peninsula.

Immigrant families who began their American experience on the Keweenaw influenced life on the peninsula with their own rich cultural diversities.

Ethnic groups attempted to maintain a unique identity while being absorbed into common work and environment.

The extant nonindustrial structures, landscapes, and traditions of the Keweenaw reflect the influences of a complex ethnic diversity and architectural traditions.

Each ethnic group had its own goals. For example, many Finns used the mines as springboards to pursue more desirable occupations in farming and logging.

Michigan's copper country attracted European immigrants from 1840–1930. The cultural heritage of these varied nationalities are still in this remarkable ethnic conglomerate. The village of Calumet is one of the most compact multi-ethnic communities outside an urban environment in the United States.

Labor Management Relations

The history of labor-management relations on the Keweenaw reflect broad national patterns.

The Keweenaw was slow to unionize in the face of long-standing and effective opposition to unions by management.

The differences between skilled and unskilled underground mine workers diminished as the companies introduced more sophisticated technologies.

The 1913 strike reflected both long-standing tensions and specific management strategies (use of new technologies) for competing in the changing world copper market.

Corporate Paternalism

Corporate paternalism greatly influenced all aspects of public/social life.

Companies built schools, provided health services, and sponsored social events.

Corporate and labor hierarchy were often based upon people's ethnic origin.

Corporate-sponsored community planning is evidenced in the architecture and cultural landscape of the Copper Country.

Institutions such as churches, fraternal and ethnic organizations, the bath house, the library, and the schools were provided or encouraged by Calumet and Hecla and Quincy Mining Companies to promote labor availability and reliability. However bars, bordellos, and unions that were controlled by mining companies were viewed as obstacles to control by company management.

The investors and management of Calumet and Hecla and Quincy Mines were primarily from eastern sources, and the housing that they commissioned for both locations reflect eastern vernacular forms such as the saltbox and double pin house.

Corporate paternalism practiced in the Keweenaw Peninsula was extremely long lived and broad in scope. Both the physical evidence and cultural heritage of this corporate paternalism are still readily apparent.

Mining Technology

The difficulty of mining, milling, smelting, and delivering copper to market from Michigan's Upper Peninsula required the evolution of technology and economies of scale to keep Keweenaw's copper-related industries competitive and profitable.

Prehistoric people liberated copper from rock by building fires against rock faces and throwing water on the hot rocks causing them to spall.

The first preindustrial mining followed European practices, principally Cornish and German, (such as hand-drilling, black powder, and hand-mucking), and organizational models for labor and payment.

Copper mining progressed from collecting native copper on and near the surface to mining fissure veins, amygdaloid lodes, wealth-producing conglomerate lodes, and finally copper sulfite lodes.

Retrieving Keweenaw copper required considerable capital investments from large corporations to make deep mining profitable.

Air blasts, rock bursts, and decreasing ore grades required technological innovation.

Milling technology progressed from gravity separation, to flotation, and lastly to leaching to produce concentrates that were smelted and cast into ingots.

The volume and completeness of original 1840–1930 records document both preindustrial and industrial era mining.

Beginning in the 1840s, copper mining in the Keweenaw Peninsula brought the initiation of large-scale corporate mining operations.

Technical innovation in hardrock mining provided leadership in the industry — for example, the world's largest steam-powered mine hoist and the first use of telephones underground.

Until 1931 the Keweenaw Peninsula contained the deepest mine shafts in the United States.

The varied uses of the “poor rock” and “stamp sands” is one of the most significant success stories of recycling an industrial by-product.

The Keweenaw Peninsula contains the oldest known copper mine in the western hemisphere and was the principal source of copper for aboriginal people.

Natural Resources

Natural resources of Michigan's Upper Peninsula influenced Keweenaw's cultural landscape to create a special sense of place.

Understanding the geology of the Keweenaw Peninsula was the key to finding economically viable copper deposits; today understanding the geology is key to appreciating landforms that attract residents and visitors to this area.

Building material obtained from local Jacobsville sandstone quarries or recycled from discarded mine rock gives the architecture of the area its distinctive regional appearance.

Water provided fairly reliable sources of food and inexpensive transportation of copper and other raw materials and machinery.

Forests provided critical components in establishing a mining industry, such as mine timbers, building materials, and fuel.

Natural factors shaped the cultural landscape by affecting how and why varied uses (mines, mills, smelters, residential neighborhoods, and commercial centers) were sited at varied places.

Weather, especially winter, on the Keweenaw shaped both the built environment and social behavior.

APPENDIX E: INTERPRETIVE PLANNING — THE NEXT STEPS

This *Draft General Management Plan* (GMP) provides general management concepts for visitor use and interpretation. It is the first of several critical interpretive planning activities. Additional planning tasks include the development of a long-range interpretive plan, several media plans, and production/installation plans.

LONG-RANGE INTERPRETIVE PLAN

A long-range interpretive plan is a vital component of the NPS planning process. It provides a vision for the future of interpretation and describes actions necessary to implement the GMP concepts. Development of a long-range plan is facilitated by an interpreter skilled in interpretive planning and is drafted by a planning team that may include site staff, interpreters from nearby parks, planners and designers, media specialists, subject-matter experts, and the public. The team analyzes the site's existing interpretive program and recommends interpretive media, services, and facilities to communicate in the most efficient and effective way possible the site's purpose, themes, significance, and values. The long-range plan would typically include the following sections and planning actions.

Purpose— Stated in the *Draft General Management Plan*

Significance— Stated in the *Draft General Management Plan*.

Themes — Stated in the *Draft General Management Plan*, but may be expanded to include compelling stories that support the themes.

Interpretive Goals — Stated in the *Draft General Management Plan*.

Visitor Experience Statement/Interpretive Objectives — Defines how interpretation will foster a physical, intellectual, and emotional visitor experience based on themes and goals. Examples are as follows:

1. Professionalize interpretation at cooperating sites to improve the programs offered by park affiliated personnel.

2. Promote the formation of historic districts and educate the public about historic preservation.

Issues and Influences Affecting Interpretation — Analyzes how long-range initiatives, influences outside site, resource concerns, and management constraints affect interpretation.

Visitor Profiles — Describes site audiences, actual and potential, and their needs as identified with scientific surveys.

Interpretive Facilities and Media Conditions — Surveys and describes existing conditions and analyzes their effectiveness in achieving site's interpretive goals.

Interpretive Program Description — Describes the services, media, and facilities necessary to achieve the site's management and interpretive mission.

Personal Services — Describes the role staff play in providing visitor experience opportunities. Examples are as follows:

1. Outlines thematic, resource-based programs to be presented by interpretive rangers.
2. Applies NPS interpretive guidelines to enhance interpretive programs offered by NPS and cooperating site interpreters.
3. Assembles slide presentations depicting historic districts in Michigan; emphasizes local public and private restoration projects during walking tours; encourages preservation forums in the region.

Nonpersonal Services — A team of media experts accesses needs and proposes appropriate wayside exhibits, museum exhibits, audiovisual programs, publications, and furnished house museums. Examples are as follows:

1. NPS interpreters review exhibits and exhibit plans for textual conciseness, graphic appeal, and historical accuracy.
2. Walking tours with publications or wayside exhibits direct visitors to significant resources.

3. Develop wayside exhibit plan for Quincy district interpretive trail.

Partnerships — Identifies organizations or facilities that should be involved in interpretive services and specifies their roles. An example follows:

1. Draft cooperative agreements to share objects and expertise between the National Park Service and other curatorial facilities; conduct demonstrations such as how patterns were used to mold machine parts; promote satellite museums and joint interpretive efforts; share research and preservation including storage and cataloging objects.

Library and Collection Needs — Defines library needs and potential uses of the collection to achieve actions proposed in the long-range plan.

Research Needs — Defines additional research needed to support the actions proposed.

Staffing Needs — Describes staff needed to accomplish plan proposals, identify alternative personnel management actions, and outline a strategy for acquiring funds.

Implementation Plan — Summarizes actions necessary to implement the long-range plan, assign responsibility, and set completion dates.

The long-range plan for Keweenaw National Historical Park should include an interpretive complex plan (ICP) component. NPS interpretive planning guidelines recommend that complex parks that share common themes with other parks, or parks that are involved in collaborative operations with other agencies, should develop an interpretive complex plan. Here interpretive themes spelled out in park legislation should be connected with cooperating sites. This plan would consider each cooperating site's interpretive interest, mandates, and constraints to identify NPS themes that can be dealt with at each site, describe shared visitor experiences related to copper mining that could be provided by each site, and conceptually describe how those experiences might be provided.

MEDIA PLANS

Following approval of the long-range plan, several media plans (i.e., wayside exhibit plan, museum exhibit plan, furnishing plan for historic house museum, publication plan, and audiovisual plan) may be needed to provide detailed planning for specific media. Based on interpretive proposals in the long-range plan, site staff would program funds for media planning, select media planner, and assemble reference materials from which media text and graphics can be developed. The media planner would visit the site, evaluate reference materials, and draft a media proposal outlining the project scope and the site, subject, and purpose of each exhibit. Following review and approval of the proposal, intense planning of each exhibit begins. The plan would contain complete text, graphic, and artifact selection from material assembled by site, map information, conceptualized artwork, size and type of media, and design layout.

PRODUCTION AND IMPLEMENTATION PLANS

A second component of media planning is a production plan, including sufficient detail to contract media production. Designers assemble photos, render original art, and complete final review of map compilations. Supervision and contract administration by a vigilant site staff and media specialist is necessary to ensure a high-quality product.

This appendix outlines the significant investment of time and energy required by site interpreters, media experts, production specialists, and installers to ensure that a professional interpretive program is presented to the public. Specific interpretive planning guidelines can be found in NPS-6, *Interpretation and Visitor Service Guideline*, chapter III, "Interpretive Planning" (Autumn 1996) and in the *Draft Interpretive Planning Handbook* (HFC 1997).

APPENDIX F: QUINCY MINE HOIST ASSOCIATION DEVELOPMENT PLAN

The Quincy Mine Hoist Association was formed in 1962 to preserve resources associated with Quincy Mining Company and to interpret the company's role in the history of copper on the Keweenaw Peninsula. The association obtained a 99-year lease on the mining company's smelting facility adjacent to Portage Lake and the #2 shafthouse and related property on Quincy Hill. Stabilization, restoration, and interpretation programs are underway, and plans for future development and operations have been formulated. Specific recommendations in those plans include the following.

The following is taken from meeting notes on February 8 or 9, 1996, when Burton Boyum described the association's plan.

PROGRAMMATIC

Walking Tour — A self-guided walking tour is proposed to direct visitors on a logical, sequential route through the area's most significant features. The tour would link other interpretive programs with stabilized and restored structures and landscapes to provide in-depth interpretation of mining technology.

Publications — An active publications program would make a variety of brochures, pamphlets, and books related to Quincy Mining Company and Keweenaw's copper industry available for purchase.

Video — An orientation audiovisual program presented to visitors upon arrival would provide an opportunity for visitors to acquire a basic understanding of the site's significance. Additional videos may be available to interpret specific chapters of the story of copper.

VISITOR USE AND BUILDING TREATMENT

Supply House: This restored building, close to and highly visible from U.S. 41, will continue to function as the historic site's gift shop and tourist information center.

Hoist House: This building would continue as one of the site's interpretive focal points. Visitor access to the building interior and interpretation of the world's

largest mine hoist would illustrate the significance of the Keweenaw copper industry and the magnitude of the Quincy Mining Company.

1894 Hoist House: This building, renovated in cooperation with Michigan Technological University, displays mining tools and mineral exhibits. It also functions as a staging area for tours of the hoist house and experimental mine.

Bathhouse: The interior of this structure would be restored, and its historic function as a bathhouse would be interpreted to visitors. Life-sized manikins would depict the structure's dual use — as a bathhouse for miners before and after their work shifts and as a community bath for women and children at designated times.

Quincy Smelting Works: Several buildings associated with the Quincy Mining Company's smelting facility adjacent to Portage Lake have been leased by the association. Stabilization of all historic structures and restoration of selected buildings is proposed. A cupola, reverberatory, and continuous casting machine would be restored to illustrate the smelting process. Self-guiding walking tours through the site would interpret historic smelting equipment, including a rare, steam-powered generator.

Shafthouse: The exterior of this structure has been restored to recreate its historic appearance and to protect the interior historic fabric. An elevator is proposed to carry visitors to the top of the shafthouse to provide an encompassing view of surrounding cultural vistas.

Locomotives: Two locomotives used by the Quincy Mining Company and currently owned by the association are proposed to be restored. They could be displayed on original tracks adjacent to the smelter buildings and interpreted to illustrate the role of transportation in the copper industry. Other locomotives will be exhibited at the mine hoist complex.

Black Smith Shop & Machine Shop: Both of these structures are proposed as a mineral museum to interpret the unique geology of the Keweenaw. Exterior restoration would be completed by the association. The interior would be adapted for

museum purposes in cooperation with Michigan Technological University and leased to the university. Visitor information, exhibits, and programs would explain the geology of the area, including fissure, amygdaloid, and conglomerate copper-bearing features. The museum would feature hands-on activities such as tumbling machines, lapidary equipment, and plastic models of crystals commonly found in the copper country.

Oil House: This small building near the supply house and proposed visitor parking area would be adaptively restored as a restroom building.

Pay Office: This building is proposed for acquisition and possible continued use as an office building.
(NOTE: Since this plan was written, the pay office was purchased by a private business.)

Experimental Mine: A guided tour into portions of a modern experimental mine and a 1860s stope would provide visitors an underground mine experience and interpretation of working conditions, mining techniques, and mine structures.

Tram: A modern tram is proposed to transport visitors from the top of Quincy Hill to the adit used for mine tours. In addition to providing public access to the mine tour, the tram could be used to interpret historic tram routes that delivered copper ore from the mine to the smelter.

Landscapes: Historic vistas within the Quincy Historic District would be restored and maintained.

Signs & Waysides: An entrance sign featuring a large piece of float copper would capture the attention of potential visitors as they travel U.S. 41 and direct them to the supply house information center. Metalphoto images of historic scenes and structures would encourage visitors to compare historic conditions to those encountered during their visit. Small signs identifying sites of several former mine structures would illustrate the magnitude of Quincy Mining Company's operations.



Keweenaw National Historical Park

Calumet Unit Concept Development Plan

March 1991
Revised 5/95

CONCEPT DEVELOPMENT PLAN

KEWEENAW NATIONAL HISTORICAL PARK CALUMET, MICHIGAN

Prepared for:

Calumet Township and the Village of Calumet

by:

The Calumet Township Strategic Plan Committee

with assistance from

**U.P. Engineers & Architects, Inc.
Houghton, Michigan**

Revised May, 1995

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INTRODUCTION

In 1971, the Universal Oil Products Company (UOP), the predecessor to Lake Superior Land Company, commissioned Barton-Aschman Associates, Inc. to analyze development potentials for their land holdings in the Keweenaw Peninsula. A key element in this study was the concept of creating a historic tourism center in Calumet, to be designated Coppertown USA.

A design concept and development program was prepared in 1972 by Barton-Aschman Associates for the Coppertown, USA theme center. The concept recommended using the historic industrial and commercial area resources as a major attraction for tourism development in the Keweenaw. However, the Calumet community at that time could not accept these findings because of their belief that the mining shutdown was a temporary condition.

The Coppertown study was the first recognition that Calumet's unique industrial heritage would be of interest to the American public. In the years following the Coppertown report, interest in the historical development increased as the likelihood of copper mining and industrial development decreased. Fortunately, depressed market conditions have preserved the historic resources to the present time.

In 1987, the National Historical Park concept began with an idea mentioned at a meeting of the Calumet Downtown Development Authority. The idea has grown through positive actions and response by the National Park Service, legislators, local community leaders, and support by the people of the Copper Country.

This Concept Development Plan for Calumet has been prepared to guide and assist legislators, the National Park Service, and local leaders with decision-making relative to the National Historical Park. The planning process was initiated to provide a concept of how and where a park can be developed in Calumet. The process also identified local actions and responsibilities necessary.

The goal of the Concept Development Plan was to create a concept that has a critical mass, functional flow and logical rhythm that makes sense from a interpretation and visitation standpoint. A second goal of the process was to create a concept that would strengthen the overall appeal and interest of the Keweenaw National Historical Park by offering interpretive themes, facilities and experiences that are different from those being suggested for the Quincy unit of the park.

This Concept Development Plan is presented as the locally supported option for the National Historical Park. It includes a summary of the significance of Calumet and the Calumet and Hecla Mining Company, a brief analysis of existing conditions, and recommendations for National Park Service and local government involvement in a National Historical Park that will be a unique experience in the Midwest and Northern United States.

NATIONAL SIGNIFICANCE

The national significance of Calumet and the Calumet and Hecla Mining Company has resulted in efforts of the community, legislators and the National Park Service to establish a National Historical Park. The designation of the Calumet National Historical Landmark in August 1989 confirmed this national significance.

The importance and contributions of the development of the Calumet copper resources to the history and development of Michigan and the United States presents a unique story. The National Historical Park has the opportunity to interpret a variety of themes that will appeal to various public interests.

This broad appeal is already evidenced by the current visitation and tourism experienced in the area. Development of the historic resources will expand this interest and resulting tourism.

Numerous books, articles, and historic studies document the prominence of C & H and Calumet. This significance is summarized by the citations listed below:

From William B. Gates, Jr., Michigan Copper and Boston Dollars, 1951.

"The most important development in Michigan and United States copper mining history during the years 1867 to 1884 was the opening up of an exceptionally rich and vast mineral body by the Calumet and Hecla Mining Company."

"In 1867 the Calumet and Hecla companies were shipping only 8.4 percent of Michigan copper; five years later the percentage was 65.3."

"The new property was a tremendous financial success as early as 1870, and between 1869 and 1884 declared over \$25 million in dividends on a paid-in capital of \$1.2 million, or about 80 percent of all dividends paid by the industry during the 18-year period."

"From 1869 to 1876 the Michigan field consistently produced over 85 percent of domestic output, Calumet and Hecla alone contributing over half of the United States total."

From Larry Lankton, Cradle to Grave, 1991.

"And stockholders were particularly blessed if they had invested early in the giant success, Calumet and Hecla, one of the world's foremost mines. Sited atop the Calumet conglomerate load--the Keweenaw's richest copper deposit by far--C & H alone accounted for 43 percent of all Lake copper produced through 1925, and for half of all dividends."

"Calumet and Hecla dominated the Lake Superior copper industry. Until the rise of Copper Range Consolidated in the early twentieth century, C & H had no legitimate rivals, and it ruled its region with a haughty self-assuredness that the only way to mine for copper, or to run a mining community, was the C & H way. It became the principle magnet for immigrants. It set the standards for wages, for company paternalism, for technologies... And because Boston investors had launched C & H, after 1870 that eastern city became the most important home of money still to be invested in the Lake Superior copper district - and of money taken out of

that district in dividends. As one wag wrote in 1928: "The four greatest words in the annals of New England are: Concord and Lexington, and Calumet and Hecla. The first two made New England history and the last two made New England fortunes."

"(Erasmus D.) Leavitt's fourth engine for C & H, destined to become one of the company's most recognized symbols of technological prowess, bore the accurate if immodest name of "Superior." This "monster" engine, contracted for in 1879 and started up nearly two years later was "the largest stationary engine in the world" and cost nearly \$100,000."

"By the late 1890s, C & H has at least 50 stationary engines at the mine, plus more at its mills and smelter, plus a stable-full of steam locomotives serving its railroad. Its stationary engines alone totaled about 50,000 horsepower. C & H produced "as much power as is now being generated by the great electrical plant at Niagara Falls, and about equal to the power used in the average manufacturing city of 200,000 people."

From Agassiz, George R., Letters and Recollections of Alexander Agassiz, 1913.

"At the time of (Alexander) Agassiz's death (in 1910), the company employed an army of fifty-six hundred men, and was mining the vast amount of about ninety-three hundred tons a day! This is believed to be the largest amount of rock mined and treated by any mine up to that time."

"The scale of the equipment (of the Calumet and Hecla) may be judged from the fact that one of the pumps at the mills had a greater capacity than any in existence, until its designer, Mr. E.D. Leavitt, built a larger one for the pumping station of the Boston Sewage Department."

From Thurner, Arthur W., Calumet Copper and People, (1974).

"William Elery Curtis called Calumet "a unique municipality" and described it in 1899 as a curious settlement which is neither a town nor a village, and is perhaps the richest community of its size in the world."

"In a sense (Alexander) Agassiz was the architect of the community that developed around the mines. He translated much of his cultural heritage from Europe and New England into decisions that marked the shaping of Calumet. A company town developed but one quite different from the grimy coal and steel towns of Pennsylvania. Agassiz and his associates helped to develop a community meeting needs often ignored or neglected in comparable company towns. A sense of 'noblesse oblige' prevailed."

"Due to the peculiar placement of mining structures and no doubt in part to the desires of the company and residents for convenient pasturage, an open space was cleared and retained between Red Jacket (Calumet's commercial center) and the mining areas. Other small towns had town squares but Calumet, like Boston, had a common, for that was what the open area was called."

From the 1915 Polk Directory.

"Calumet Village has a population of 30,000, making it the largest incorporated village in the United States."

Other noteworthy facts:

The Red Jacket Shaft is listed as the deepest vertical shaft in the world.

The statue of Alexander Agassiz that stands next to the C & H Library building was sculpted by Paul Wayland Bartlett, a student of the renown Auguste Rodin. Bartlett's works are world famous as his figure of Lafayette stands at the entrance to the Louvre in Paris.

Of the 11 billion pounds extracted from the Lake Copper district, C & H produced over 5 billion!

Harry Benedict, C & H metallurgist invented the ammonium leaching process in 1916. His process made possible the recovery of scrap copper and steel for the War Production Board during WWII.

Kate Lidfors, NPS Historian and co-author of the initial NPS Options Report stated "In my view, Calumet is one of the most compact ethnic communities outside of urban neighborhoods and is one of the best national candidates for interpretation to the public."

THE DEVELOPMENT PLAN

A Concept Development Plan for a National Historical Park in the Calumet Landmark District is presented as an exciting opportunity to interpret an important story of America's industrial heritage. The concept combines interpretive facilities dealing with technology, underground copper mining, and the growth of a corporate giant, while telling a story of the unique community and social life in a north country town.

The National Park Service is expected to play a major role in the development of the Keweenaw National Historical Park, through the establishment of a visitor and interpretive complex. In addition, it is envisioned that the Park Service will be involved with complimentary activities in Calumet that includes technical assistance and cooperating sites.

The Village of Calumet and Calumet Township will also have responsibilities. Several projects that compliment NPS activities are currently being implemented and others are being planned. Both physical development and administrative/regulatory programs are being considered by local government to assist the National Historical Park.

This section of the report describes the Concept Development Plan. It provides a review of existing conditions, a summary of the overall concept, and outlines specific development actions by the National Park Service and other organizations.

EXISTING CONDITIONS

Location/Access: The Keweenaw National Historical Park was designated for an area that includes the Calumet National Landmark District. This district includes areas within the Village of Calumet and Calumet Township. These local governments comprise most of the area known as Calumet, located in north Houghton County. The area is on the Keweenaw Peninsula, in Michigan's Upper Peninsula.

The Calumet area is accessed by U.S. Highway 41, Michigan Highways M-203 and M-26, about 12 miles north of the cities of Houghton and Hancock. U.S. 41 also serves as the eastern boundary for the Calumet National Landmark District and provides convenient access to the sites proposed for Historical Park development.

Several areas within the National Landmark District Boundary are proposed for historical development. Portions of the Calumet and Hecla Industrial District and the Calumet Downtown Historic District (both listed on the National Register of Historic Places and part of the National Landmark District) offer interpretation potential. Automobile access to these areas can be accommodated conveniently from U.S. 41 via the Sixth Street extension or Red Jacket Road.

Land Use: A variety of land use is found in the National Landmark District, including various densities of housing, downtown commercial, institutional and industrial uses. As a result of the community planning policies of the Calumet and Hecla Mining Company, these uses are generally orderly with few intrusions. The land ownership successor to C & H, the Lake Superior Land Company, has carefully carried out the C & H land planning tradition in recent years.

Due to the high quality of construction found in the C & H Industrial Complex, a number of buildings have been adapted for new uses. The C & H Library is Lake Superior Land Company's offices; the Roundhouse houses Calumet Electronics, a manufacturing company; the Bathhouse is an office building; the Agassiz House is a women's shelter home; and the C & H Office Building is being used primarily as a medical center. The headquarters for the Keweenaw National Historical Park is located in this building. These adaptive reuse projects have been sensitive to the original architectural of the structures.

Some buildings and land in the district are vacant. This is the result of local market conditions and the land policies of Lake Superior Land Company.

Utilities and Services: The Keweenaw National Historical Park is extremely well served by water, sewer, and the full range of municipal services. A \$1.1 million water system improvement project and a \$7.5 million wastewater system project have been recently completed.

Development Controls/Zoning: Both Calumet Township and the Village of Calumet control land use and development through zoning. Building and sign permits are required for construction.

Michigan law enables local governments to establish historic district regulations and commissions for the preservation of historic resources. The Village of Calumet and Calumet Township are jointly working toward the establishment and administration of historic district regulations.

THE CONCEPT PLAN

The Concept Development Plan for a National Historical Park in Calumet includes a large visitor and interpretive center to be developed in the Calumet and Hecla Industrial District, south of Red Jacket Road. Existing historic industrial buildings will be adapted for visitor and interpretive facilities. Concept development proposed for the National Park Service is summarized below:

NATIONAL PARK SERVICE DEVELOPMENT

The C&H Office Building: This fine building with its Italian masonry and stonework will continue to serve as the National Park Service headquarters.

The Machine Shop: The largest building in the complex is proposed to interpret the growth and development of C & H into a corporate giant. Technological innovations and specialized equipment will be displayed. It may be possible to relocate the Ahmeek Mill Stamp to this building for interpretation. A key display would be a large scale, three dimensional model of the C & H Industrial Complex as it once stood.

The Blacksmith Shop: A park orientation and visitor center would be developed in the C & H Blacksmith Shop to serve as the first stop in the typical park visit. Here, tourists will be informed of park facilities, activities, and programs.

The Warehouse #1 Building: This structure is proposed as an interpretive center dealing with exploration, geology and a copper products exhibition. A satellite of the world-class AE Seaman Mineralogical Museum at Michigan Technological University is proposed to be located here.

The Osceola #13 Mine: The Osceola #13 shafthouse, and hoist complex presents an opportunity to interpret copper mining in a more modern context. This mine complex culminates 100 years of C & H mining history. Interpretive facilities at this complex, and adjacent company housing would anchor the southern portion of the park complex. One of the largest electrical hoists in the world is housed in the complex. Osceola #13 will be linked to Calumet with the street car and recreational trail corridor.

The Union Building: To interpret unique characteristics of the social and community life in Calumet that resulted from corporate policies and paternalism, it is proposed that the Union Building on Fifth Street be developed. It should be noted that this building was built as a bank and post office, not as a union hall. The location of an interpretive facility in this building will provide a linkage between the industrial complex and the historic downtown district.

The Calumet Depot: At the west side of the Village of Calumet on the rail corridor at Oak Street, is a railroad depot. This building served as the point of entry to Calumet for all immigrant mine workers and their families. Immigration and transportation are the themes that can be interpreted here. The adjacent Yellow Jacket residential area could also be interpreted from the depot.

The Agassiz House: In contrast to modest company housing for miners are the homes of company executives, mining captains and merchants. The Agassiz House, which served as the house of Alexander Agassiz, president of C & H, is located north of Red Jacket Road adjacent to the industrial complex. It is suggested that this home be used to interpret the turn-of-the-century home life of a corporate executive.

LOCAL DEVELOPMENT

Complimenting proposed National Park Service facilities in the Concept Development Plan are other existing community assets, future facilities, and activities. These include the Downtown Historic District, Calumet Theatre, a Firefighters Museum, Agassiz Park, the Coppertown USA Museum, and the Swedetown Ski Touring Center. A trail system for pedestrians, bicycles and skiing is proposed to link the Industrial Complex with the Depot and Swedetown Ski Touring Center, following existing railroad grades. The trail linkage will provide opportunities for interpretation of mine shaft locations and other buildings. These trail corridors can also

accommodate a streetcar system/transit link in the future.

Cooperating Sites: Through partnership arrangements, key historic sites, businesses and tourist attractions are designated as National Park cooperating sites, throughout the region. Cooperating sites in the Calumet area include the Calumet Theatre, the Coppertown USA Museum, and the Laurium Manor Inn.

The Calumet Downtown Historic District: Downtown Calumet is a key element in the overall concept. The downtown presents a rather unique northern town because of its scale, development pattern and numerous turn-of-the-century commercial buildings, that have seen little or no alteration. The proximity of the downtown to the C & H Industrial District is beneficial. The downtown offers various interpretive and cultural coordination opportunities. Downtown Calumet also provides a location for appropriate spinoff development that will result from the National Historical Park Development. The development of historic streetscape restoration on Fifth, Sixth, Portland, Oak and Elm Streets is proposed in order to enhance the turn-of-the-century flavor of downtown Calumet. A local historic district ordinance and commission is proposed to guide and regulate building improvements to maintain the historic integrity of the downtown and Village.

The Calumet Theatre: The Calumet Theatre is noted as one of the nations first municipal theatres. It remains one of Michigan's best known historic theaters. The exterior of the downtown Theatre has been restored and extensive work has been done to the interior. Cultural coordination by the National Park Service is suggested. The Theatre will remain under control and ownership of the Village and will continue its program of music, theatrical and cultural activities. The Theatre is presently a cooperating site.

Agassiz Park: Calumet's historic "commons" was acquired by the Village of Calumet. In recent years, public restrooms have been constructed. Fourth Street was reconfigured as part of this project to improve public parking. Future development will include restoration of the Agassiz Park plantings and walkways.

Italian Hall Park: This park on the site of the razed Italian Hall is a memorial to the 1913 Christmas Eve tragedy that resulted in the accidental death of 73 persons, mostly children. The park was dedicated on November 13, 1989 by Manuel Lujan, then Secretary of Interior. A stone and brick arch marks the doorway of the demolished Italian Hall, where this tragedy occurred, constructed by volunteers in the park.

The Firefighters Museum: The 1898 Red Jacket Fire Hall, located across the street from the Calumet Theatre, is owned by the Village of Calumet. It is noted as one of the Village's finer historic buildings. The Fire Hall is leased to the Upper Peninsula Firefighters Museum, Inc., a non-profit organization. NPS technical involvement is suggested.

Coppertown USA: Located in the C & H pattern shop, Coppertown USA is an existing museum which interprets Keweenaw Peninsula copper mining history. A model of the Keweenaw Peninsula mining developments would be a possible interpretive tool.

Swedetown Ski Touring Center: A new chalet, parking area, trail improvements, and state of the art grooming equipment have made this facility one of the best cross country ski centers in the Midwest. Skiers will enhance park visitation during the winter season. A direct ski trail linkage with the park is proposed for the mutual benefit of both facilities. Calumet Township

is proposing to acquire the land used for ski trails and the rail corridor.

Calumet Lake Recreation Area: Calumet Lake is located immediately north of the Village. The lake was the site of the first mill for Calumet and Hecla. Calumet Township is analyzing the development of a recreation area at Calumet Lake, that could include camping, fishing and other outdoor recreation facilities. The complex would be linked to the Village and National Historical Park via the streetcar and trail systems.

St. Anne's Church Ethnic Embassy: Calumet Township has acquired the sandstone French Gothic church for reuse as a community owned Ethnic Embassy. The project will be a local effort to interpret the ethnic heritage and culture of 30 nationalities that immigrated to the area.

Sixth St. Extension Improvements: In conjunction with the development of Mine Street Station, a new commercial development, the Township is proposing pedestrian walkways and lighting along the Sixth Street extension. This project will provide an important linkage with proposed NPS facilities and new commercial development.

Dry House & Drill Shop: These buildings house a large collection of drill core samples. The collection is of potential interest to geologists and could be developed as a depository of geologic information.

SPECIFIC ACTIONS FOR THE NATIONAL PARK SERVICE

The Concept Plan summarizes a scenario for interpretation of historically significant copper mining and community characteristics in Calumet. Outlined below are specific recommendations for National Park Service action:

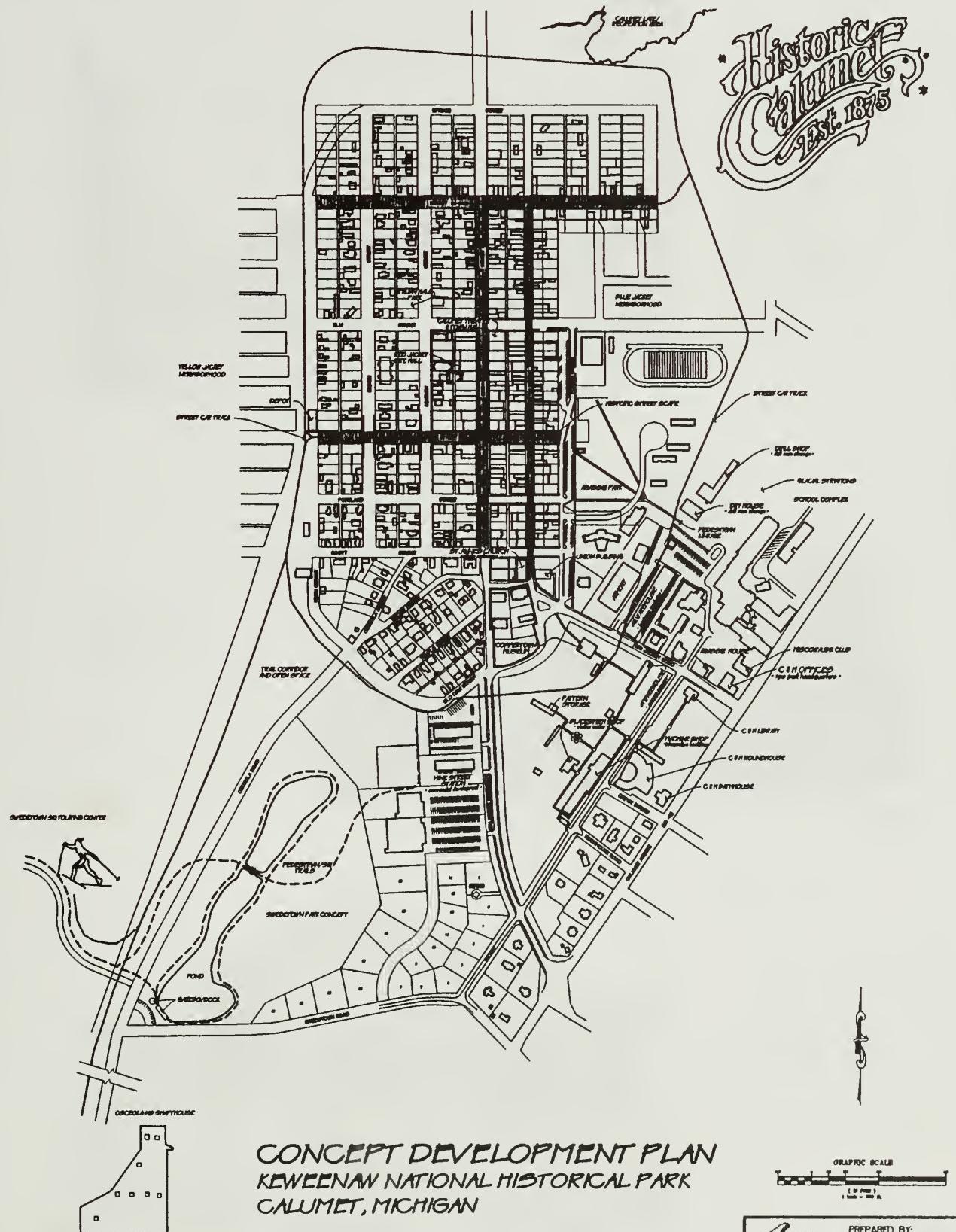
a. Land Acquisition

Include acreage bounded by Red Jacket Road, Mine Street, Swedetown Road, and Old Dam Road, Sixth Street Extension to Scott Street, Fifth Street back to Red Jacket Road. In addition, a strip of land parallel to Mine Street from Swedetown Road to Osceola #13 and along the Sixth Street extension.

b. Acquire and develop buildings to serve as a large visitor complex as listed below:

- (1) The C & H Office Building for National Park Service headquarters and administrative offices.
- (2) Renovate the C & H Machine shop for an interpretive center. Move the Ahmeek mill Stamp there from Tamarack City. Display other large equipment and technological innovations. The building will interpret C & H's role as an industrial giant. A large scale model of the entire complex is recommended.
- (3) The Blacksmith shop would be a visitors and orientation center where visitors would learn about the park and be directed to other buildings.
- (4) The Warehouse #1 to interpret exploration, geology, a copper products exhibition, and a satellite display of the state of Michigan's Mineralogical Museum at MTU, one of the best collections in the world.
- (5) The Osceola #13 mine shafthouse and hoist would interpret that era of mining and technology. Restore to the 1920 era the four miners residences on "E" Street across the #13.
- (6) The Union Building (first post office and bank) will interpret unique characteristics of Calumet's community and social life.
- (7) The Calumet Railroad depot the on the rail corridor at Oak Street will interpret immigration and serve as a future transportation linkage center with the Quincy unit.
- (8) The Agassiz house will interpret the home life of executives.
- (9) Marking and interpretation of mine shaft locations and other important buildings.

- c. Receive gifts of land and buildings to include:
The Coppertown USA complex, including four acres and 2 buildings. Coppertown, USA is willing to donate this operating museum to the National Park Service.
- d. Technical Assistance
NPS should provide advice to private property owners and to historically-related organizations in the area, including the firemen's museum, historical societies, etc.
- e. Cultural Coordination
NPS should use the Calumet Theatre for interpretive plays, programs, events and activities.
- f. Cooperating sites
Regional attractions and historic/cultural sites will be recognized, marked and promoted as cooperating sites.



**CONCEPT DEVELOPMENT PLAN
KEWEENAW NATIONAL HISTORICAL PARK
CALUMET, MICHIGAN**

PREPARED BY:
**U.P. ENGINEERS &
ARCHITECTS, Inc.**
MAY 1995
Houghton • Norway • Escanaba • Marquette



HISTORIC
COMMERCIAL
BUILDINGS
ON SIXTH
STREET,
IN THE VILLAGE
OF CALUMET.



THE CALUMET
THEATRE AND
TOWN HALL.



THE CALUMET
DEPOT.



FROM LEFT, THE
C&H LIBRARY,
AGASSIZ HOUSE,
AND THE C&H
ADMINISTRATION
BUILDING AS
VIEWED FROM
ACROSS US 41.
NOTE THE
CAPPED
MINESHFT IN
FOREGROUND.



THE C&H LIBRARY,
NOW THE LAKE
SUPERIOR LAND
COMPANY OFFICES.
NOTE THE STATUE
OF ALEXANDER
AGASSIZ ON THE
LEFT.



THE CHURCH
CLUSTER, AS
VIEWED FROM
THE C&H
INDUSTRIAL
DISTRICT.



THE C&H
MACHINE
SHOP. THE
BLACKSMITH
SHOP CAN
BE SEEN TO
THE RIGHT.



THE COPPERTOWN,
USA MUSEUM.



THE OSCEOLA 13
MINE COMPLEX.

APPENDIX H: SOME THOUGHTS FOR THE COMMISSION AND PARTNERSHIP TO CONSIDER DURING PREPARATION OF A COMPREHENSIVE MANAGEMENT PLAN FOR THE COMMISSION

VISION AND LEGACY

As noted in this document's "A Partnership for the Park and Peninsula — The Foundation" chapter, the permanent partnership could provide the catalyst for the people of the Keweenaw Peninsula to preserve and interpret the area's mining heritage and share its story with the rest of the world.

To accomplish this, however, will require the commission and its partners to develop a vision for the Keweenaw that will ensure the following:

Significant resources and stories related to the copper mining heritage of the Keweenaw will be preserved and interpreted.

Cultural values of the people of the region will be protected, yet shared with others in a positive and meaningful way.

Visitors will be encouraged to come, stay, enjoy, and learn.

An adequate Peninsula infrastructure — road system, parking facilities, restaurants, overnight accommodations, and other necessary visitor services — will be in place to accommodate the expected level of visitation.

Other significant resources and stories in the Keweenaw, although not necessarily directly related to the mining heritage stories, will also be preserved and shared to enhance the quality of the visitor experience.

Partnership efforts will provide additional incentives for new or renewed public and private investment in the area, which will stimulate economic growth.

Values of residents will be considered and not be compromised.

All of this must be done to the highest possible standards that will make residents proud and visitors glad they came and anxious to return.

However, the vision is more than the preservation and interpretation of resources and economic revitalization. Above all, the story of copper mining in the Keweenaw is the story of the people whose traditions, memories, and cultures are represented in the sites, buildings, and artifacts of the Keweenaw.

GOALS AND OBJECTIVES OF THE COMMISSION AND ITS PARTNERS

The following goals and objectives could be established for the commission and the partnership to implement the vision and form the foundation for future planning. If the commission is to be truly successful, goals and objectives are needed that are flexible enough for all partners. The following goals and objectives describe specifically what the partnership could do and how it might be implemented.

1. Establish leadership and management capability for future partnership success.

Objectives:

Define tasks, roles, and responsibilities of partners.

Establish and implement policies and procedures.

Establish an information and assistance network.

2. Install a cultural conservation ethic as well as a preservation consciousness in the Keweenaw's leaders and residents.

Objectives:

Identify tangible and intangible resources in the peninsula.

Provide for public participation in conserving and interpreting heritage.

Develop and implement a cultural conservation program.

Develop educational initiatives.

Integrate preservation considerations into land use and community planning and development.

Encourage preservation values of community leaders and those providing services through educational programs.

Provide preservation incentives through grant and loan funding.

3. Maintain and protect the diversity of the peninsula's significant resources that are essential to the partnership's success.

Objectives:

Inventory and evaluate resources; establish a resource management program.

Promote recreational and other uses with cultural treatment of resources.

4. Provide a high-quality visitor experience.

Objectives:

Develop a comprehensive plan for interpreting Keweenaw's copper mining heritage.

Establish criteria for a high-quality interpretive experience (define desired visitor experiences).

Promote and provide high-quality services and accommodations for visitors.

Provide improved transportation systems to and within the Keweenaw Peninsula.

5. Attract more visitors to the Peninsula.

Objectives:

Coordinate facilities and programs.

Market available educational and recreational activities and cultural, natural, recreational, and scenic resources.

Provide information about area resources to the public.

Link interpretation to tourism promotion.

6. Sustain regional economic growth and diversity.

Objectives:

Identify and enhance opportunities for public and private sector development related to the peninsula's cultural and mining heritage.

Incorporate the partnership initiatives into overall economic development planning.

Encourage adaptive reuse of historically significant buildings.

7. Evaluate short- and long-term accomplishments of the partnership.

Objectives:

Establish evaluation criteria and processes.

Implement and monitor that process over the short term and the long term.

Modify the partnership's efforts as appropriate, based on findings.

Once such a plan is put in place and as all partners work toward the goals, opportunities for area residents to participate in the growth and diversification of the region will be realized. This growth and diversification will be balanced by the conservation of its significant cultural, natural, and recreational resources, its rich and diverse cultural heritage, and its community values.

SELECTED BIBLIOGRAPHY

Anonymous Works

- ca. 1859-1931 "Annual Reports." Quincy Mining Company. Houghton, Michigan: Michigan Technological University Archives and Copper Country Historical Collections.
- ca. 1855-1910 "Annual Reports." Superintendent of Public Instruction, Michigan. Lansing, MI.
- 1898 "Charter and Ordinance." Red Jacket Village. Calumet, MI.
- 1854 "Cliff Mine." *Mining Magazine* 7 (1856); 3 (Nov.-Dec. 1854).
- 1948 "Companies Get Rid of Housing." *Business Week*. 16 October .
- 1992 "Conservation and Preservation of Environments." *Traditional Dwellings and Settlements Working Paper Series*, vol. 38. Center for Environmental Design Research, Berkeley: University of California.
- 1990 "Conservation of Urban Religious Properties." *Information*. No. 47. National Trust for Historic Preservation.
- 1913 "Contract Systems in Michigan Copper Mines." *Engineering and Mining Journal*. December 20, 1913, 1176-78.
- ca. 1859-1931. "Correspondence between Mining Agents and Company Presidents of the Quincy Mining Company." Houghton, Michigan: Michigan Technological University Archives and Copper Country Historical Collections.
- 1992 "Criteria for Cultural Landscapes under the World Heritage Convention." *The Association for Preservation Technology Bulletin* 24(3) (1992): 79-80.
- 1992 "Cultural Diversity and Historic Preservation." 46th National Preservation Conference, sessions I-III. Audiovisual, 1 videocassette (60 min.).
- 1883 "History of the Upper Peninsula of Michigan Containing a Full Account of Its Early Settlement: Its Growth, Development and Resources." Chicago, Illinois: Western Historical Society.
- 1916 *Keweenaw Miner, Calumet & Hecla Mining Company Semi-Centennial Edition, 1866-1916* Calumet, MI.
- 1987 "A Preservationist's Glossary." *Landscape Architecture* 80 (1987): 38-56.
- 1917 Red Jacket. A series of maps of the Calumet area. New York: Sanborn Map Co.
This is one of a series of Sanborn maps documenting Calumet.
- 1943 "Scrap Recovery Campaign in Michigan Iron and Copper Country: A Model." *Mining and Metallurgy* 24 (July 1943): 317.
- 1913 "Strike Investigation." Committee of the Copper Country Commercial Club of Michigan. Chicago, IL.

Authored Works

- Alanen, Arnold
1979 "The Planning of Company Communities in the Lake Superior Mining Region." *Journal of the American Planning Association* 45 (July 1979): 256-78.
- 1991 "Companies as Caretakers: Paternalism, Welfare Capitalism, and Immigrants in the Lake Superior Mining Region." In *A Century of European Migrations, 1830-1930*, by Rudolph J. Vecoli and Suzanne M. Sinke. Urbana: University of Illinois Press.
- 1979 "Documenting the Physical and Social Characteristics of Mining and Resource-Based Communities." In *Association for Preservation Technology Bulletin* 11(4): 49-68.
- 1981 "Finns and the Corporate Mining Environment of the Lake Superior Region." In *Finnish Diaspora II: United States*, edited by Michael G. Karni. Papers of the Finn Forum Conference November 1-3, 1979. Toronto, Canada.
- 1988 "Finns and Other Immigrant Groups in the American Upper Midwest: Interactions and Comparisons." In *Finns in North America: Proceedings of Finn Forum III 5-8 September 1984* edited by Michael G. Karni, Olavi Koivukangas, and Edward W. Laine. Turku, Finland, 1988.
- 1990 "Immigrant Gardens on a Mining Frontier." In *The Meaning of Gardens*, by editors Mark Francis and Randolph Hester. Boston: MIT Press.
- Barkell, Gordon G. ed.
1963 *Hancock, Michigan Centennial, 1863-1963*. Hancock Centennial Committee.
- Barnet, LeRoy
1983 *Mining in Michigan: A Catalog of Company Publications 1845-1980*. Marquette: Northern Michigan University Press.
This is a key bibliographic source of company records.
- Basaltic Volcanism Study Project.
1981 *Basaltic Volcanism on the Terrestrial Planets*. New York: Pergamon Press, Inc.
- Beck, William
1970 "Law and Order during the 1913 Copper Strike." *Michigan History* 54 (Winter 1970): 275-292.
- Benedict, C. Harry
1952 *Red Metal: The Calumet and Hecla Story*. Ann Arbor, Michigan: University of Michigan Press.
- Benedict, C. Harry
1955 *Lake Superior Milling Practice: A Technical History of a Century of Copper Milling*. Houghton, Michigan.

SELECTED BIBLIOGRAPHY

- Bornhorst, T. J.
- 1992 "Michigan Tech Earth Science Laboratory and Experimental Mine Connecting with the Quincy Native Copper Mine, Michigan." *Society of Economic Geologists Guidebook Series* 13: 197 p.
- 1994 "Tectonic Context of Native Copper Deposits of the North American Midcontinent Rift System." *Geological Society of America*. Special paper.
- Bornhorst, T. J., ed.
- 1992 "Keweenawan Copper Deposits of Western Upper Michigan." *Society of Economic Geologists Guidebook Series* 13: 197 p.
- Bornhorst, T. J. and R. C. Whiteman
- 1992 "The Caledonia Native Copper Mine, Michigan." *Society of Economic Geologists Guidebook Series* 13: 139-144.
- Bornhorst, T. J. and W. I. Rose, Jr.
- 1994 "Self-guided Geological Field Trip to the Keweenaw Peninsula, Michigan." *Institute on Lake Superior Geology Proceedings*. 40(2): 185 p.
- Butler, B. S., and W. S. Burbank
- 1929 "The Copper Deposits of Michigan." *U.S. Geological Survey Professional Paper* 144: 238 p.
- Calumet Township Bicentennial Commission
- 1976 *1776-1976 Calumet Township Bicentennial Celebration: A 1976 Synopsis*. Limited edition. Calumet, MI.
- Calumet Township Centennial Committee
- 1966 *Calumet Township Centennial, 1866-1966*. Souvenir program.
- Calumet Township Strategic Plan Committee
- 1995 *Calumet Concept Development Plan*. Prepared with assistance from U.P. Engineers and Architects, Inc.
- Calumet Village Centennial Committee
- 1975 *Village of Calumet Michigan 1875-1975*. Souvenir Centennial Book. Calumet, MI.
- Curtis, William Eleory
- 1899 "Calumet, a Unique Municipality." *Chautauquan* 29 (April 1899): 33-37. Quoted in Arthur W. Thurner. *Rebels on the Range: The Michigan Copper Miners' Strike of 1913-1914*, 19. Hancock, Michigan: Book Concerns Printers 1984.
- Eckert, Kathryn
- 1982 "The Sandstone Architecture of the Lake Superior Region." Ph.D. dissertation. Michigan State University, East Lansing, MI.
- Erickson, Charlotte
- 1957 *American Industry and the European Immigrant, 1860-1885*. Cambridge, MA.
- Eustis, William
- 1818 "Experiments Made by the Assay-Master of the King of the Netherlands, at the Mint of Utrecht, on the Native Copper Existing in Huge Blocks on the South Side of Lake Superior." *American Monthly Magazine and Critical Review* 2: 366-67.

- Fadner, Lawrence T.
 1966 *Fort Wilkins 1844 and the U. S. Mineral Land Agency 1843.* New York: Vantage Press.
- Gates, William B. Jr.
 1951a *Michigan Copper and Boston Dollars.* New York, NY: Russell and Russell.
- 1951b *Michigan Copper and Boston Dollars: An Economic History of the Michigan Copper Industry.* Cambridge: Harvard University Press.
- Gedicks, A.
 1976 "The Social Origins of Radicalism among Finnish Immigrants in the Midwestern Mining Communities." *The Review of Radical Political Economics* 8 (Fall): 1-31.
- 1977 "Ethnicity, Class Solidarity, and Labor Radicalism among Finish Immigrants in Michigan Copper Country." *Politics and Society* 7(2): 127-56.
- Halsey, John R.
 1983 "Miskwabik--Red Metal: Lake Superior Copper and the Indians of Eastern North America." *Michigan History* (Sept.-Oct.): 32-41.
- Hulbert, Edwin J.
 1893 '*Calumet Conglomerate,' an Exploration and Discovery Made by Edwin J. Hulbert, 1854-1864.*' Ontonagon, MI.
- Hyde, Charles K.
 1984 "From 'Subterranean Lotteries' to Orderly Investment: Michigan Copper and Eastern Dollars 1841-1865." *Mid-America: An Historical Review* 66 (January): 3-20.
- 1986 "Undercover and Underground: Labor Spies and Mine Management in the Early Twentieth Century." *Business History Review* 60 (Spring): 1-27.
- 1978 *The Upper Peninsula of Michigan: An Inventory of Historic Engineering and Industrial Sites.* Washington, D. C.: U. S. Government Printing Office.
- Italian Ethnic Committee
 1976 *Copper Country Italian American Bicentennial Celebration Souvenir Booklet.* Ishpeming, MI.
- Johansen, John Roger, Architect
 1981 *Calumet Downtown Historic District Plan: Calumet, Michigan, Part 2: Municipal Responsibilities.* Prepared under the direction of the Village of Calumet Downtown Development Authority. Houghton, MI.
- Kellogg, Louise P.
 1925 *The French Regime in Wisconsin and the Northwest.* Madison, Wisconsin: State Historical Society of Wisconsin.
- Keweenaw Centennial Committee
 1961 *Keweenaw County Centennial, 1861-1961.* Official Historical Souvenir Program.
- Krause, David J.
 1992 *The Making of a Mining District: Keweenaw Native Copper 1500-1870.* Detroit, Michigan: Wayne State University Press.

SELECTED BIBLIOGRAPHY

- LaBerge, G. L.
1994 *Geology of the Lake Superior Region*. Phoenix, Arizona: Geoscience Press, Inc.
- Lankton, Larry
1991 *Cradle to Grave: Life, Work, and Death at the Lake Superior Copper Mines*. New York, NY: Oxford University Press.
- 1983a "Died in the Mines," *Michigan History* 67 (November-December).
- 1983b "The Machine under the Garden: Rock Drills Arrive at the Lake Superior Copper Mines, 1868-1883." *Technology and Culture* 24 (January): 1-37.
- 1985 "Paternalism and Social Control in the Lake Superior Copper Mines, 1845-1913." *Upper Midwest History* 5 (1985).
- Lankton, Larry D. and Charles K. Hyde
1982 *Old Reliable: An Illustrated History of the Quincy Mining Company*. Hancock, Michigan: The Quincy Mine Hoist Association, Inc. 159 p.
- Lankton, Larry D. and Jack K. Martin
1987 "Technological Advance, Organizational Structure, and Underground Fatalities in the Upper Michigan Copper Mines, 1860-1929." *Technology and Culture* 28 (January): 42-66.
- Manning, W. H.
1919 "Village and Homes for Working Men," *Western Architect* 16 (August): 84-88.
- Michigan Employment Security Commission, Financial and Management Services
1993 *Annual Planning Information Report 1993, Western Upper Peninsula Service Delivery Area*. Information and Reports Section.
- Michigan State Historic Preservation Office, Bureau of History
1973a "Calumet Downtown Historic District." National Register of Historic Places Nomination Form, by Kathryn B. Eckert. Washington, D. C.
- 1973b "Calumet Fire Station." National Register of Historic Places Nomination Form. Washington, D. C.
- 1973c "Calumet and Hecla Industrial District." National Register of Historic Places Nomination Form. Washington, D. C.
- Monette, Clarence J.
1985 *A Copper Country Logger's Tale*. Second of a local history series. Lake Linden, MI.
- Monette has at least 45 titles of this privately published local history series. These include: *White City — The History of an Early Copper Country Recreational Area; Some Copper Country Names and Places; Lake Linden's Yesterday — A Pictorial History*, vols. 1, 2, 3; *Hancock, Michigan, Remembered — Churches of a Hancock*, vol. 2; *Early Red Jacket and Calumet in Pictures*, vols. 1-2. A complete listing of Monette's titles is in the *C & H News - View 4* (December 1985): 4.
- Murdoch, Angus
1943 *Boom Copper: The Story of the First U. S. Mining Boom*. New York: Macmillan Company.

- National Park Service, U.S. Department of the Interior
 1988a "Calumet Historic District." National Register of Historic Places Nomination Form by Kathleen Lidfors. Washington, D. C.
- 1988b "Quincy Mining Company Historic District." National Register of Historic Places Nomination Form. Washington, D. C.
- 1991a "Cultural Landscape Program Development in the NPS Midwest Regional Office" by Mary V. Hughes. *CRM Bulletin: A NPS Technical Bulletin* 14(6): 20-21, 26.
- 1991b *Study of Alternatives, Proposed Keweenaw National Historical Park*. Copy available at Denver Service Center.
- 1992 "Preserving the Past and Making It Accessible for People with Disabilities." A pamphlet.
- 1995a Memo from Shawn P. Mulligan, Attorney-Advisor, WASO Hazardous Waste CERCLA Program Coordinator dated April 12, 1995. Memo subject is "Proposed Acquisition of Properties Potentially Burdened with Hazardous Substances at Keweenaw National Historical Park, MI." Copy available at Denver Service Center, Technical Information Center, Denver, CO.
- 1995b *Special History Study: A Geological History of the Keweenaw Peninsula* (Disk).
- 1996 *Special History Study: Ethno-Religious Architecture in the Calumet-Laurium Settlement Area* (Disk).
- 1997a *Draft Interpretive Planning Handbook*. Harpers Ferry Center.
- 1997b *Historic Resource Study: Keweenaw National Historical Park*. In review, expected publication September 1997.
- Preservation Urban Design, Incorporated
 1979 *Calumet Downtown Historic District Plan*. Calumet, Michigan: Calumet-Laurium-Keweenaw Chamber of Commerce.
- Proctor, Dean Wade
 1990 *Continuity and Change in a Cultural Landscape: Preservation Planning and Design on the Gogebic Iron Range of Wisconsin and Michigan*. Master's thesis. Madison: University of Wisconsin.
- Pumpelly, Raphael
 1886 *Report on the Mining Industries of the United States*. U. S. Bureau of Census, 1880 Census, vol. 15, pt. 2, Washington, D. C.
- Puotinen, Arthur E.
 1977 "Early Labor Organization in the Copper Country." In *For the Common Good: Finnish Immigrants and the Radical Response to Industrial America*, M. G. Karni and D. J. Ollila, Jr. editors, Superior, Wisconsin: Tyomies Society.
- 1979 *Finnish Radicals and Religion in Midwestern Mining Towns, 1865-1914*. New York.
 This study was originally a Ph.D. dissertation out of the University of Chicago in 1973.

SELECTED BIBLIOGRAPHY

- Pyne, William
1957 "Quincy Mine: The Old Reliable." *Michigan History* 41: 219-242.
- Quincy Mine Hoist Association
nd *Quincy Mining Company Hancock, Michigan: Mine-Mill-Smelter-Community*. Calumet, Michigan: The Copper Press.
- Red Jacket Village, Michigan
1898 *Charter and Ordinance*. Calumet, MI.
- Rees, Robinson, & Petermann, et al.
1914 "Brief of Counsel for the Mining Companies, the Sheriff of Houghton County, Michigan, and the Michigan National Guard in the Matter of the Hearing Before a Sub-Committee of the Committee of Mines and Mining. . ." 12 August 1914. n.p. Calumet and Hecla Records.
- Rose, W. I., T. J. Bornhorst, C. A. Chesner, D. G. Leddy, L. Lodise, and R. B. Symonds
1986 "Heavy Metals in Sediments and Mining Wastes of Torch Lake, Michigan." pp. 119-151.
Copy available at Van Pelt Library, Michigan Technological University, Houghton, MI.
- Soil Conservation Service, U.S. Department of Agriculture
1991 *Soil Survey of Houghton County Area, Michigan*, by Charles Schwenner. Soil Conservation Service, Houghton, MI.
- Steele, Paul T.
1982 *Tamarack Town: Mines-People-Places*. Calumet: Copper Land Graphics.
- Swineford, Alfred P.
1876 *History and Review of Copper, Iron, Silver, Slate and Other Material Interests of the South Shore of Lake Superior*. Marquette, Michigan: The Mining Journal. Quoted in Larry Lankton. *Cradle to Grave: Life, Work, and Death at the Lake Superior Copper Mines*, 26, Oxford University Press: Oxford, 1991.
- Thurner, Arthur W.
1974 *Calumet Copper and People: History of a Michigan Mining Community*. Hancock, Michigan: Book Concern Printers.
- 1976 "How a Library Came to Copper Country: A Saga of Miners and Capitalists." *Wilson Library Bulletin* 50 (April) 608-12.
- 1983a "Technology Old and New: The Copper Country Miner and the One-man Drill, 1913-1914." Paper presented at Michigan Technological University, Houghton, Michigan, May 5 1983.
- 1983b "The Western Federation of Miners in Two Copper Camps: The Impact of the Michigan Copper Miners' Strike on Butte's Local No. 1." *Montana: The Magazine of Western History* (Spring): 30-45.
- 1984 *Rebels on the Range: the Michigan Copper Miners' Strike of 1913-1914*. Hancock, Michigan: Book Concern Printers.
- 1994 *Strangers and Sojourners: A History of Michigan's Keweenaw Peninsula*. Wayne State University Press, Detroit.

- Todd, Arthur Cecil
1967 *The Cornish Miner in America*. Glendale, CA: Clark Barton
- Trounsen, J. H.
1985 *Mining in Cornwall*. 2 vols. Redruth, Cornwall, England.
- U. S. Bureau of Labor Statistics
1914 *Michigan Copper District Strike*. Bulletin No. 139. Washington, D. C.
- U. S. Bureau of the Census
1960 *U. S. Census of Housing, 1960*. Vol. 1, State and Small Areas, Part 5: Michigan-New Hampshire. Washington, D. C.: U. S. Government Printing Office.
- 1970 *Census of Housing: 1970*. Vol. 1. Housing Characteristics States, Cities, and Counties, Part 24, Michigan. Washington, D. C.: U. S. Government Printing Office.
Earlier *Census of Housing* reports date back at least to the 1930s and also would be useful.
- U.S. Department of Commerce, Economics and Statistics Administration, Bureau of Economic Analysis
1995 *Regional Economic Information System* (CD ROM). Regional Economic Measurement Division, Washington, D.C.
- U.S. Environmental Protection Agency
1992 "Record of Decision, Torch Lake Site, Operable Units I and II, Houghton County, Michigan." Copy available at USEPA, Region 5, Waste Management Division, Chicago, IL.
- 1995 *Guidance on Agreements with Prospective Purchasers of Contaminated Property*. Office of Enforcement and Compliance Assurance (May 24, 1995). Copy available at USEPA, Region 5, Waste Management Division, Chicago, IL.
- U. S. House, Committee on Mines and Mining
1914 *Conditions in Copper Mines of Michigan*. Hearings before subcommittee pursuant to House Resolution 387. 63rd Congress, 2nd sess. 7 pts.
- U. S. Immigration Commission
1911 *Reports of the Immigration Commission: Immigrants in Industries*. Senate Document No. 633. Serial 5677. 61st Congress, 2nd Session. Washington, D. C.: U. S. Government Printing Office.
Parts 17 and 18 discuss conditions on the copper and iron ore ranges of the Lake Superior Region.
- U. S. Secretary of Labor
1914 *Strike in the Copper District of Michigan: Letter from the Secretary of Labor Transmitting in Response to a Senate Resolution of January 29, 1914, A Report in Regard to the Strike of Mine Workers in the Michigan Copper District Which Began on July 23, 1913*. Senate Document No. 381. Serial 6575. 63rd Congress. 2nd. Session. Washington, D. C.: U. S. Government Printing Office.
- Village of Calumet
1974 "Calumet, Michigan: Historic District, Architectural Descriptions."

SELECTED BIBLIOGRAPHY

- Western Upper Peninsula Planning and Development Regional Commission
1977 *Historic Preservation Plan*. Houghton, MI.
- 1990 *Michigan Copper Mining District Historic Resources Management Plan* by Deborah L. Dobson-Brown, Project Director and Principle Contributor, and Stephen I. Albee, Project Coordinator and Contributor.
- 1996 *Historic Architecture Field Survey, Calumet Village, Laurium Village and A Portion of Calumet Township* by Lynn Bjorkman, Project Director and Principle Contributor, and Stephen I. Albee, Project Coordinator.
- White, Richard
1991 *It's Your Misfortune and None of My Own*. Norman, Oklahoma: University of Oklahoma Press.
- Whittier, John Greenleaf
1848 Quoted in Arthur W. Thurner. *Strangers and Sojourners: A History of Michigan's Keweenaw Peninsula*, 63. Detroit: Wayne State University Press, 1994.
- Whittlesey, Charles
1863 “Ancient Mining on the Shores of Lake Superior.” *Smithsonian Contributions to Knowledge* 13: no. 155: 1-29.
- Yarbrough, Edward B.
1996 *Church Architecture in the Calumet-Laurium Settlement Area, Michigan: A Study of Ethno-Religious Forms, Regional Building Materials, Social History, and Preservation Issues*. M. A. thesis, Historic Preservation Program, School of Architecture and Allied Arts, University of Oregon.

Newspapers and Trade Journals

Calumet News

Copper: A Weekly Review of the Lake Superior Mines

Copper Country Evening News (Calumet, Michigan)

Daily Mining Gazette and Sunday Mining Gazette (Houghton, Michigan)

Daily Mining Journal (Marquette, Michigan)

Detroit Free Press

Evening Copper Journal (Hancock, Michigan)

Lake Superior Miner

Miners' Bulletin

Miners' Magazine

Mining and Scientific Press

Mining Congress Journal

Portage Lake Mining Gazette (Houghton, Michigan) predecessor to the *Daily Mining Gazette*

Tyomies

United Mine Workers' Journal

Archives and Manuscript Collections

Agassiz Museum Archives. Museum of Comparative Zoology. Harvard University. Cambridge, Massachusetts.
Alexander Agassiz Papers.

Bentley Historical Library. University of Michigan. Ann Arbor, Michigan. Woodbridge Ferris scrapbook.
Industrial Records.

Department of Landscape Architecture. Iowa State University. Ames, Iowa. Warren H. Manning Collection.

Immigration History Research Center, University of Minnesota, St. Paul, Minnesota.

Jack Foster Collection. Calumet, Michigan. Photographs and other memorabilia.

Lake Superior Land Company. Historic maps and files.

Lowell University. Warren H. Manning Papers. Massachusetts.

Michigan State Archives. Michigan Department of State. Lansing, Michigan. Woodbridge N. Ferris Records
Relating to the Labor Strike in Copper Mining Industry, 1913-1914; General Industry and Labor.

Michigan Technological University Archives and Copper Country Historical Collections. Houghton, Michigan.
Calumet and Hecla Mining Company, Copper Range Consolidated Mining Company, Quincy Mining
Company collections; Copper Range Railroad; Miss Brockway's Diary; Newspapers.

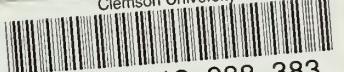
Norlin Library. University of Colorado. Boulder, Colorado. Western Federation of Miners Collection.

State Historical Society of Wisconsin. Division of Archives and Manuscripts. Madison, Wisconsin. American
Federation of Labor Papers; John L. Lewis Papers; and Papers of the U. S. Commission on Industrial
Relations

Suomi College Archive. Finnish-American Heritage Center, Suomi College. Hancock, Michigan. Suomi
Synod of the Finnish Evangelical Lutheran Church; the Finnish National Brotherhood of Temperance
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As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.



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